



EIGHTEENTH YEAR, No. 4.

MILWAUKEE, APRIL, 1893.

\$1.00 per Year. 10c. per Copy.

# THE EDW. P. ALLIS COMPANY,

✻ **Mill Builders and Mill Furnishers,** ✻

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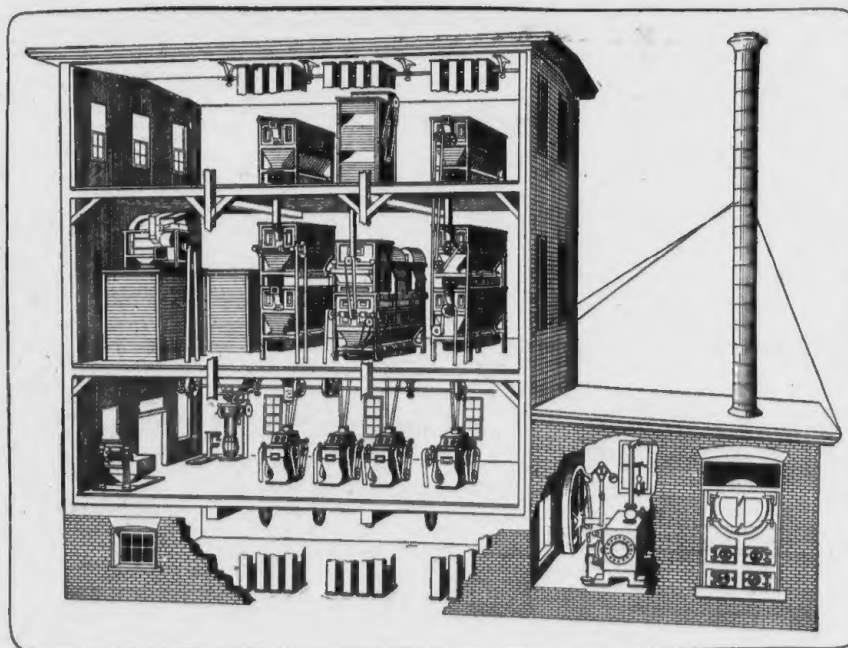
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## Complete Flour Mill Outfits of any Capacity,

WITH OR WITHOUT MOTIVE POWER.

ALSO FOR

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Reel Scalpers,  
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Flour Dressers,  
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Wheat Cleaners,  
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WE CAN FURNISH ANYTHING YOU NEED IN THIS LINE AT THE  
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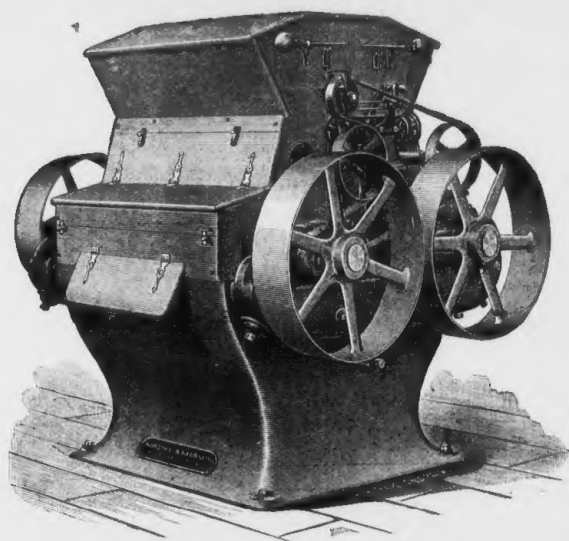
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ALSO

OUR HAND BOOK "SMALL MODERN MILLS," CONTAINING ILLUSTRATIONS  
AND DESCRIPTIONS OF MILLS FROM 25 to 100 BBLs. CAPACITY.

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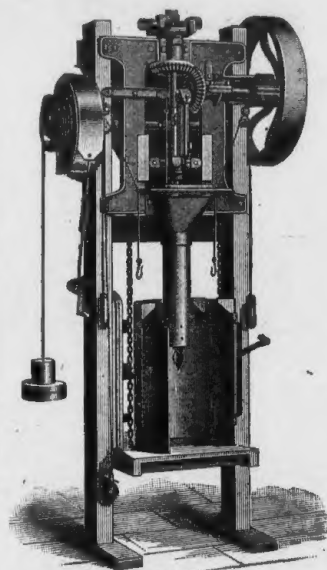


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The Heaviest and Most Rigid Roll Made.

## NO PRUDENT BUYER

Will place his order for Roller Mills, Scalpers, Dressers, Purifiers, Bran Dusters, Degerminators, Roller Corn Mills, or other special machinery for Flour Mills, Fine Corn Goods Plants, Starch and Rice Mills and Grain Elevators before examining our goods and obtaining our prices.

Write for new price lists and other printed matter.



Our Bran Packer guaranteed to pack Bran in same space required by an equal weight of hard packed flour.

**NORDYKE & MARMON CO.,**  
INDIANAPOLIS, IND.

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Send for copy of the New Edition of the

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More copies of this work are in actual use to-day than of all other Flour Cable Codes combined.

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## ANSONIA \* ROLLS

FOR USE IN ROLLER MILLS.

The general experience of American Millers unites in pronouncing these Rolls the very best for Flouring Mill use.

• • These Rolls are now used in all Leading Flouring Mills. • •

CHILLED ROLLS FOR PAPER MILLS A SPECIALTY.

## MILL PICKS

I am one of The Oldest and the Most Extensive Mill Pick Maker in the United States.

30 YEARS EXPERIENCE.

I keep on hand a large stock of new Picks of all sizes.

OLD PICKS DRESSED AND RETURNED PROMPTLY

New Picks will be sent to all parts of the country on trial, and if not first-class, return them at my expense.

### AN OFFER

To any miller who has never had any of my work I will dress Six Picks Free of charge.

Write for prices and other information. Ship Picks to the Old, Reliable Mill Pick Maker,

**W. S. CASTERLIN,**  
Luzerne, Luzerne Co., Pa.

## ROPP'S CALCULATOR

[Revised Edition for 1890.]



This book with its numerous tables, short cuts in figures, etc., is simply invaluable to Millers, Grain Dealers, Farmers and Business men generally. Prices, post-paid, as follows: No. 1, Bound in waterproof leatherette, 50 cents. No. 2, Fine artificial leather, with pocket, silicate slate and account book, 75 cents. No. 3 American Russia or Morocco, with pocket, slate and RENEWABLE account book, \$1.00. Address, **UNITED STATES MILLER,** MILWAUKEE, WIS.

Don't forget to mention this paper when you write.

# THE UNITED STATES Miller

EIGHTEENTH YEAR, No. 4.

MILWAUKEE, APRIL, 1893.

\$1.00 per Year. 10c. per Copy.

## F. H. MAGDEBURG.

President of Milwaukee Chamber of Commerce.

THE subject of this sketch and accompanying portrait, was born in Weisbaden, Germany, January 24, 1841. In 1854 he came to Milwaukee and found employment as messenger boy in a bank. In 1859 he was appointed cashier of a bank at Chilton, Wis. In 1861 he acted as transcribing clerk of the Wisconsin State Senate, and later as private secretary of State Secretary Harvey. During the war of the rebellion he commanded Company G, Fourteenth Wisconsin Regiment, a company which he organized at Chilton, and participated most actively in the campaign of the Army of the Tennessee. After the expiration of his services he performed the duties of a Provost Marshal at Green Bay, Wis. When peace was declared Capt. Magdeburg accepted a position as cashier in the Chicago Union Stock Yards. In 1866 he returned to Milwaukee, where he started an insurance business, and in 1876 he became identified with the Gem Milling Co. Capt. Magdeburg is a gentleman of fine appearance, is the head of one of the most respected German-American families of Milwaukee, an influential citizen, known and liked in all circles, able and of irreproachable character.

Capt. Magdeburg is president of the Gem Milling Co., whose plant is located at corner Knapp and River streets, is treasurer of the National Transportation Association, and the newly-elected President of the Milwaukee Chamber of Commerce, of which, for years past, he has been one of the directors. A man of education and great business experience, he conscientiously administers whatever duties he undertakes.

### MODERN RAILROADING.

As Viewed from a Miller's Stand-point.

NO one here attempts to deny that railroads are a convenience to the traveling public, an aid to business, and a neces-

sary acquisition to the demands of a live community, but the writer of this article ventures to assert that railroads are a source of great expense, annoyance, and serious and damaging aggravation to the well-meaning and simple-hearted grinder of grists, a hindrance to prompt and satisfactory business trans-

draft and receive a bill of lading for the car. You are assured by the shipper that "every effort will be made to get this car through promptly," but you wait a week,—two weeks,—a month, and still no car has come to bless (or curse) you with its bounty. You write in the meantime several letters to your shipper, and are informed that the

But the days go by. The cold, heartless breezes make merry with your gray locks, and as you pass, with bowed head, wearily around the depot corner, after the agent has shaken his head at you through the window (he knows your errand) the unfeeling zephyrs howl triumphantly around your bearded cheeks, and you d— the railroad and wish you lived in an age when railroads were unknown.

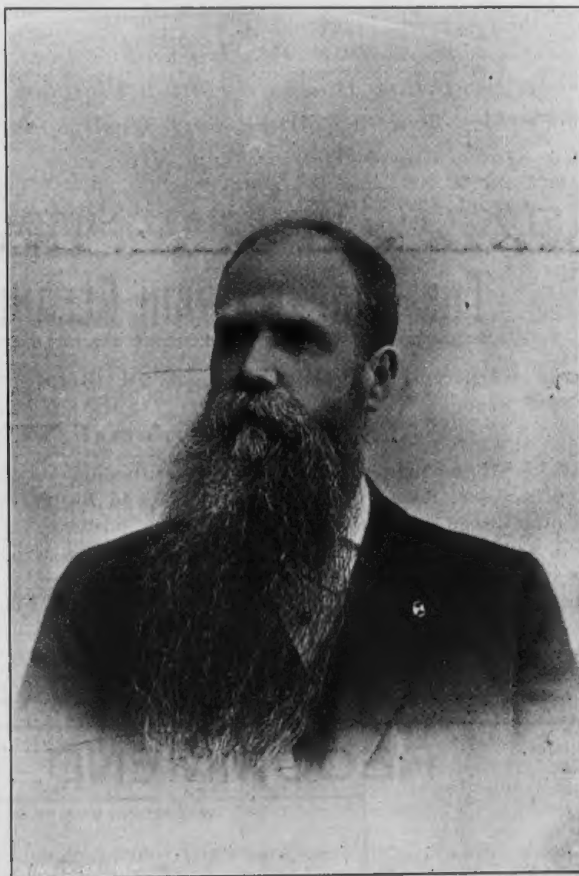
Sixty days, or even more in some rare cases, have elapsed between the date of shipment of a car of grain from Chicago and its arrival at destination in the east. At this writing the R. W. & O. R. R. is waiting the arrival of more than 300 cars of freight consigned to Fulton, and which are now between suspension Bridge and Oswego or Syracuse. The recent storms have had some effect on traffic, delaying considerably, but the unprecedented annoyance caused by these delays of the past month does not lie wholly with Foster or whoever makes the storms. Who is to blame? Where does the fault lie? And can no remedy be applied to effect a cure?

You get your car after long delay, expense and suspense. You must unload it within 48 hours after its arrival or pay demurrage. Must we millers always submit to this? Remonstrances sent to railroad authorities have no apparent weight, but wise and impartial legislation would soon effect a startling change. Let us look to it and see what can be done. Let us unite and, by our combined efforts, gain a footing on the floor and a hearing in the chamber, and be no longer at the mercy of a scheming railroad corporation, paying their price, accepting their terms, and doing their bidding.

But now we yearn for the happy summer days again, when we can once more hear the boatman's lusty voice as he commands his driver to "turn 'em round and fetch 'em back," when we can listen to the ripple of the water against the dock, and can get our grain once more on time by the glorious old CANAL.

WINTON.

Fulton, N.Y., March 14, 1893.



F. H. MAGDEBURG.

actions, and a barrier in the path of the miller who waits in vain, watching, weary in mind and body, almost in despair, for that car of corn shipped from a western town, or for that car of wheat or oats started so long ago from Chicago or Detroit.

It is not an unusual occurrence this: To order a car load of grain from Chicago, receive advices of its shipment, pay the

car is being "traced." You confer with your local railroad agent who takes down the number of the car and tells you he will "look it up." Perhaps you telegraph once or twice, and may even go to the length of writing to the general freight agent of the line, remonstrating gently, and humbly requesting that he "take the matter up."



# H. W. CALDWELL & SON COMPANY,

127, 129, 131 and 133 West Washington Street,

CHICAGO, ILL.



## Conveying, Elevating and Power Transmitting Machinery.

### Manilla Rope Transmission Outfits Complete.

Sheaves, Pulleys, etc. up to 120 inches diameter, 60 inches face.



## CALDWELL STEEL CONVEYOR.

Clark Automatic Grain Shovels, Link-Belting and Sprocket Wheels.

Elevator Boots, Bolts, Buckets and Spouts, Rubber, Leather and Cotton Belting,  
Gears (all kinds), Hangers, Shafting, Pillow Blocks, Friction Clutches, Jaw  
Clutches, Iron Pulleys, Set Collars, Take-up Boxes, Turn Head Spouts,  
Perforated Metal, Wire Cloth, Cogswell Grinding Mills, etc.

LARGE AND COMPLETE STOCK FOR IMMEDIATE SHIPMENT.

"South Bend"  
Wood Split Pulleys,  
with Iron Hubs  
and Iron Bushings.  
Will not slip on shaft.  
No danger from fire.



Avery Plain and  
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Corrugated Seamless  
Steel Elevator  
Buckets.



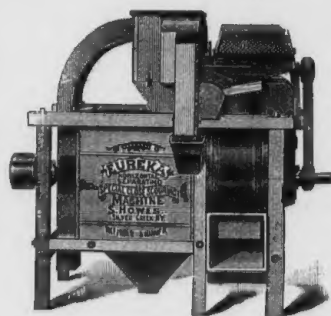
## THE EUREKA GRAIN CLEANING MACHINERY

Stands admittedly at the head of all machines built for a similar purpose.

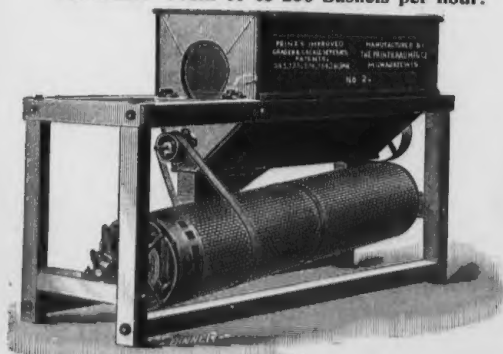
### And WHY?

BECAUSE correct principles were embodied in them and correctly applying these principles, using the best materials and high grade labor, enabling us to build the best machines, and by fair dealings have built up the largest works of its kind in the World, shipping them to every part of the Globe where wheat is grown, and our annual sales exceed those of all others, and each year showing an increase over the one previous, affords indubitable evidence that the principles upon which the Eureka is built and operates, are in the broadest possible sense correct.

S. HOWES, Sole Builder, SILVER CREEK, N. Y.



Ten Sizes. From 15 to 230 Bushels per hour.



Slow Motion. Little Power. Small Space.

THE PRINZ & RAU MFG. CO., MILWAUKEE, WIS.

Don't forget to mention this paper when you write.

## RECOMMEND THEM AS THE BEST

WASHBURN, CROSBY CO., Merchant Millers.

Minneapolis, Minn., March 4th, 1893.

THE PRINZ & RAU MFG. CO., Milwaukee, Wis.:

In answer to your inquiry regarding the Prinz Cockle Separator would say: We have had 14 of your No. 3 machines in use in Washburn Mill "A" for the past three years, and can fully recommend them as being the best all round cockle separators we have ever used.

Yours Very Truly,

JAMES McDANIEL.

## THE PRINZ COCKLE MACHINES

Are guaranteed to take out all Cockle, Garlic and similar seeds without wasting wheat.

ONLY MACHINE IN THE WORLD WHICH HAS AN INDENTED STEEL CYLINDER

SEND FOR CATALOGUE OF REDUCED PRICES.

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## CALL OF THE N. A. O. M.

SEYMOUR, IND., April 15, 1893.

The first annual meeting of the N. A. O. M. will convene in Indianapolis, Indiana, at the Spencer House, on the First Tuesday in June, 1893.

All Operative Millers and Head Millers are earnestly requested to be present, as it is the Annual Election of Officers.

Other matters of great importance will be transacted for the good of the Order. Let us have a good representation of the "Brother Dusteys" from all the States.

WILLIS A. DOBSON, Pres.

W. M. CHURCH, Sec.

## RANDOM THOUGHTS.

BY WANDERER.

MILLERS are continually on the lookout as to what will be the next improvement that they will be compelled to adopt in order to push them in the front rank. Some few are eager to be the first to catch hold of the latest device that promises a revolution, in order to have the advantage of the improvement, for a time at least, before their neighbors become aware of the importance. They are likely to not recommend the new machine in order to hold others off. On the other hand there are some who dread the time when they will be compelled to fall in line. They will hope against their own conviction that the "new comer" is a success, until they find themselves compelled to adopt it.

Millers vary greatly in their ideas as to mill construction, and you generally find them strongly prejudiced in favor of their pet ideas. Some who exercise the best of judgment, in a general way, are apt to surprise you by asserting themselves in favor of some peculiar device that is not at all fitted to a first-class equipment. For instance, one man may call for

everything on an elaborate scale and will want all of his connections to be of the most servicable nature, but finally surprises you completely by asserting himself in favor of using link belting wherever it is possible to apply it. Another will tell you that he believes in long surface on rolls, and plenty of them, also to have all machines of more than ample capacity, and then wind up by saying that he would much prefer a six inch roll to a nine inch. It might well be compared to the cow that furnishes good milk, but finally kicks over the pail. An expert machinery salesman recently told me that some peculiarity, of one kind or another, could be found where one would least expect it, and that he hardly dared to advocate all that is generally considered "standard," fearing that his prospective customer might misconstrue the idea as slighting or a cut in the machinery.

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Let a mill machinery manufacturer start out with whatever machine or combination of machines that he may, while he will find some that utterly refuse to acknowledge any merits, there are others who see millions in the outfit as advocated and are ready to buy. The main trouble, perhaps, that most machinery salesmen have to contend with, is that price cuts more of a figure in the transaction than nearly every thing else combined. The machinery salesman has much to learn before he is fully capable of holding his own in the field. I know several millers who started out in the capacity of salesmen, but soon came to grief, not because they were not good millers and did not know what constitutes a good mill, best suited to the customer, but simply because they lacked the tact which is essential toward making a success at selling. The chances are that some

other fellow would come along with a more inferior line of machinery and sell it at a better figure. If, in such a case, the miller would, later on, discover the mistake he made and repent it, the chances are that the very next time he would again buy from this same party who "did him up" the first time. There is something more required, when selling machinery, than to be a first-class miller. No doubt, on the other hand, a good knowledge of milling is a good quality for any salesman to possess.

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A great many salesmen are very unscrupulous and go so far in their questionable methods towards securing a contract, as to lay themselves liable to mistrust right from the start. I have met machinery salesmen who were bright, intelligent men, and who had abundance of wit at their finger's ends. They could discuss politics or any topic of conversation in the most brilliant manner, in fact prove themselves as being fully conversant with all matters pertaining to milling and mill building, and well stocked with a sufficient amount of common sense with which to carry them through any emergency, but they are apt to be possessed with one very severe failing, and that is to allow their silver tongues to get away with them when referring to competitors. They sail into them most unmercifully and go so far as to misrepresent them in the most ridiculous manner possible, thus destroying all chances for doing any good for themselves, and cause the customers to mistrust and drive him away from them altogether.

## PAYMENTS WHICH STOP STATUTE OF LIMITATIONS.

IT is a usual provision of statutes of limitation, that no acknowledgment or promise takes the case out of the operation of the statute, "unless the acknowledgment or promise is in writing, and signed by the party which is chargeable thereby." But no indorsement or memorandum of payment made on a promissory note, by or on behalf of a party to whom such payment is made, is sufficient proof of payment to take the case out of the statute of limitations; and no such payment made by one joint contractor affects the liability of another. It is well recognized and familiar law that the "effect of payment of any principal or interest," made and intended as part payment of a debt, is an acknowledgment of that debt, and a renewal of the obligation to pay it. In other words, while a mere acknowledgment or promise must be in writing, and signed by the party chargeable, to render it valid, a new prom-

ise is implied from the fact of a partial payment of principal or interest.

But it is the fact of payment which operates as a renewal of the promise and removes the statutory bar, and not merely the indorsement on the note. The indorsement is simply evidence of payment, and sufficient evidence only when made by the party liable to pay the note. The indorsement may never be made, but if the fact of the payment is satisfactorily established by other evidence, it is equally effectual to save the case from the operation of the statute. A case once arose in which there was an indorsement on the note in the handwriting of the maker, to the effect that \$50 had been received on it. It appeared however, that in fact no money had been paid. But the owner offered to prove that it was agreed between the parties, when the endorserment was made, that it should be deemed payment, sufficient to save the note from the statute of limitations. This evidence was held inadmissible. The court said: "Payment, within the meaning of the statute, must be the actual payment of money or its equivalent;" it therefore necessarily follows, that an indorsement that does not represent such a payment, and is not signed by the party to be charged, cannot be made, by force of an oral agreement, evidence of a new and continuing contract.

It is immaterial of what the payment consists, so long as it is intended as a payment on the bill. The part payment need not be in money, but in any mode which the parties agree shall be treated as a payment in money, or equivalent thereto. Therefore the settlement of accounts, whereby it was agreed between the parties that the interest up to that time should be considered as paid and discharged, is such a payment as takes the case out of the statute. There are numerous cases which establish that there may be a payment by settlement of accounts. When two persons indebted to each other meet and agree to set off their respective debts, that is not a mere settlement of accounts, but is as much a payment as if the money had passed between them. Where a payment is relied on as taking a debt or note out of the statute of limitations, it must have been such a transaction as was intended by the party making it, to be in good faith a payment on account of the obligation, and such a payment cannot be proved by the endorserment of the payment or account, by the party in whose favor it operates, if the one to be charged thereby disputes that he made the payment.

The practical importance of this rule of law will be the more fully appreciated when the



universality of the custom of indorsements is considered. There are almost no cases in practical business life which fall within its provisions. The custom is so general for the indorsement of payment to be made by the holder of the note or account, that a contrary practice would be hailed as a commercial innovation. But it would seem that, viewing the subject from the standpoint of protection from the statute of limitations, the indorsement should always be made by the payor and not by the payee.

#### THE PLANET MILL EXPLOSION.

THE Planet mills, at Litchfield, Ill., was totally destroyed on the morning of March 21. The fire was discovered at about 3:30 o'clock A. M., and the firemen had hardly got in working order when a terrific explosion occurred, caused, presumably, by the fire having reached the dust room. The explosion shook the earth over quite a wide area, while the atmospheric concussion was felt a distance of fifty miles. The head millwright, John Carve, of Waterloo, in making an effort to secure his tools from the burning building, was stunned by the explosion, and, endeavoring to escape, was pinned against the smokestack and burned to death. When found about three hours afterwards, his legs were burned off at the hips, the right arm and left hand were entirely consumed, and his body was burned to a perfect crisp.

The large elevator standing immediately across the Wabash tracks, west of the mill, and containing some 250,000 bushels of wheat, was quickly in flames, and, together with its valuable contents, burned to the ground. Ten or twelve cars of wheat, standing on the house track, were reduced to ashes.

The property was owned by the Kehlor Milling Co., of St. Louis, and the loss is placed at \$500,000. The insurance is as follows: On new elevator building, \$30,000; on stock in old elevator, \$30,250; on building, machinery, etc., \$136,700; on stock in mill, \$2,750. The Planet mill was built in 1881 by D. L. Wing, an Eastern flour merchant, who had come out West and established himself in Litchfield, Ill. After the mill was finished, it was bonded for \$150,000. The mill had been fitted with the Jonathan Mills Disk system. After running several years, D. L. Wing failed and the Boatmen's Bank took the mill for debt. Mr. J. B. M. Kehlor bought the bonds and became proprietor. In 1885, Mr. Kehlor discarded all the machinery and put in a new system, remodeling the entire mill. Since then additional buildings have been erected and the machinery

changed to keep up with the time. The number of barrels of flour manufactured at the mill in 1892, as given by the books, was 447,600. With the destruction of the Planet, Mr. Kehlor sustains the loss of six mills within the past twelve years. The mills destroyed were as follows: Venice mills, at Venice, Ill.; Pacific mills, at St. Louis, Mo.; Waterloo mills, at Waterloo, Ill.; Edwardsville mills, at Edwardsville, Ill.; Laclede mills, at St. Louis, Mo.; Planet mills, at Litchfield, Ill. It is said Mr. Kehlor never rebuilds a destroyed mill but looks about and buys another one, refits and remodels it to his ideas.

#### DECIDED IN THE COURTS.

**PATENT NOT VOID BY DEATH OF PATENTEE BEFORE ISSUED.**—Where, before the application for a patent, the inventor agreed to assign one-half of it for money to be advanced to obtain it; and, the inventor dying before the patent was issued, an agreement was made by his widow, who was afterwards administratrix of his estate, with such assignee, that he should press the application for a patent, and, if patented, introduce the machine, and divide with her the profits until she received \$5,000, after which she was to release all further interest in the patent to him; the patent when issued, should be construed as a grant to him as assignee, and held to have been obtained with his authority and that of the administratrix. An amendment, after the death of the applicant for a patent, of the original specification, made within the scope of the invention described therein and of the original oath and in limitation of the claims, without filing any new oath or power of attorney does not render the patent void; nor is it void because no new oath was filed after the applicant's death.—*The De La Vergne Refrigerator Co. v. Featherstone*.—U. S. Supreme Court. Rep. 263.

**LOANS TO MEMBER OF BUILDING & LOAN ASSOCIATION ON STOCK.**—Where one subscribed for 600 shares of stock in a building and loan association, by his contract, and by the by-laws of the association, he was to pay \$360 per month as dues on the 600 shares of stock, or \$4,320 per year, or \$38,880 in nine years. Desiring an advancement or loan on his stock, he made an application to the association to advance him \$30,000 on his stock, which was done. He was to put 6 per cent per annum interest on the same. In considering whether the loan was a usurious one, payments to be made upon his stock are not to be considered as interest on the money borrowed. Nor are they to be computed as such, since such pay-

ments are not made for the use of the money borrowed, but in order to acquire an interest in the nature of a partnership interest in the property of the association. *Tilley v. Am. Build. & Loan Ass'n*. Circuit Court W. D. Ark. 52 Fed. Rep. 618.

**ASSUMPTION OF RISK BY EMPLOYEE.**—In an action for personal injuries by an employee who had been working in a factory six weeks, the last two weeks in assisting other boys, a part of whose duty was to put on a belt operating certain machinery with revolving gears; that on the day of the accident he had taken the place of one of these boys, and in putting on the belt his arm was drawn into the gears and injured; that the gears were in plain sight, and that he had a dread of putting on the belt because he thought he would be hurt; that he had seen the belt put on, and had put it on once before the accident; that he was 16 years old and of ordinary intelligence. Knowing the danger of the employment, he assumed the risk. Where there was evidence that the belt was old and fastened with belt hooks, but no evidence of any defect in the machinery or that the injury was caused by the belt coming off, the question of defective machinery was properly excluded from the consideration of the jury.—*Downey v. Sawyer*. Supreme Court of Mass. 32 N. E. Rep. 654.

**RIGHT OF FOREIGNER TO TRADE MARK.**—A foreigner who registers a trade mark consisting of a red anchor in a white oval space or field, in connection with particular words, cannot afterward enlarge his rights, as against persons having in good faith an established business under the symbol of an anchor, by a new registration, claiming broadly the use of the picture of an anchor.—*Richter v. Anchor Remedy Co.* Circuit Court W. D. Penn. 52 Fed. Rep. 455.

**ACTION FOR A BREACH OF CONTRACT TO DELIVER GOODS.**—In an action for the breach of a contract to deliver goods, evidence of the loss of profits in the purchaser's business resulting from the breach, and of his expenses in going to a distant city for other goods, is inadmissible; such losses and expenses being too remote and speculative to constitute elements of damages.—*Goodell v. Buff City Lumber Co.* Supreme Court of Ark. 21 S. W. Rep. 104.

**PAYMENT OF ANOTHER'S DEBTS.**—A written agreement entered into by a debtor and two of his creditors, whereby the debtor grants, bargains and sells to them his entire stock of goods, fixtures, accounts, etc., in consideration of their coven-

ant to pay the claims of his other creditors, whose names, with the amounts due, are specified in the agreement, does not constitute the two covenanting creditors' trustees for the debtor, to apply the property in payment of the claims specified, but is an absolute sale, and renders them absolutely liable to the creditors mentioned in the agreement.—*Cook v. Berrott*. Supreme Court of New York. 21 N. Y. Sup. 358.

**ALLEGATION OF OWNERSHIP OF PATENT.**—In a bill for infringement of a patent it is sufficient merely to allege that one became the owner of the patent on a certain date, without also alleging continued ownership at the time of filing the bill. *Krick v. Jansen*. Circuit Court S. D. New York, 53 Fed. Rep. 823.

**DISSOLUTION AND ACCOUNTING OF PARTNERSHIP.**—In an action between parties for dissolution and accounting, an order for payment of the referee's fees out of the funds in the hands of the receiver may be made, although the receiver may have incurred liabilities, with the sanction of the court, in excess of such funds available for payment.—*Crotty v. Jarvis*. Court of Common Pleas of N. Y. Sup. 728.

THE following from the advance statement of the United States Bureau of Statistics gives the amount and value of the exports of domestic Breadstuffs from all American ports during the month of March, 1893, and same month 1892:

	1893.		1892.	
	Bush.	Value.	Bush.	Value.
Barley.	588,753	275,948	232,860	140,522
Corn.	3,474,196	1,772,473	11,335,867	5,836,747
Oats.	62,710	25,071	58,283	27,585
Rye.	17,944	13,579	713,777	704,717
Wheat.	6,851,140	5,318,837	8,276,185	8,500,347
Total.	10,994,743	7,406,514	20,616,332	15,208,918

The following, in addition to above, were exported during the month of March, 1893: Cornmeal, 20,260 bbls, value, \$58,343; oatmeal, 565,773 lbs., value, \$18,096; wheat flour, 1,411,777 bbls, value, \$6,383,332. The total valuation of breadstuffs, exported during the month, was \$13,886,285 against \$23,072,442 for same time in 1892. The total for nine months, ending March 31, 1893, was \$145,032,766, against \$233,159,912 for same time in 1892, and for first three months of the two years, respectively \$40,407,188 and \$77,170,719.

**ENGINEERING JOURNAL:** The wealthiest nation on the globe is the United States, which has an assessed valuation of \$47,475,000,000, next coming Great Britain with \$43,600,000,000. France ranks third with \$40,300,000,000; then Germany with \$31,600,000,000. Russia comes next with \$21,715,000,000; Austria follows with \$18,065,000,000, and Italy succeeds with \$11,735,000,000.

## News.

M. A. DUNAVAN will build a flouring mill at Jonesboro, Ark.

GOOCH & MCCUE will build and operate a 120-barrel flouring mill at Bluefield, W. Va.

THE removal of the flouring mill at Latah, Wash. to Rosalia, same state, is under consideration.

THE Marsh mills at Valley City, N. D., have been rented to Mr. S. M. Grant, who took possession April 1.

THE Edward Corbett Mill Supply Company, Salem, Va., has been reorganized as the Salem Machine Works.

WILLIAMSTON, Mich., has raised \$1,355 toward a bonus for a flour mill to replace the one burned last January.

A ROLLER process flouring mill, of thirty barrels daily capacity will be built at Love's mills, Va., by the Love's Mill Co.

THE Georgia Mill and Elevator Company, of Macon, Ga., will increase its capital to \$200,000 and enlarge its plant.

A FLOUR and grist mill of fifty barrels daily capacity, will be erected at Goodlettsville, Tenn., by Geo. W. Spottswood.

THE R. G. Skinner Milling Company, of Albert Lea, Minn., has filed articles of incorporation. The capital stock is \$35,000.

THREE OAKS, Mich., wants a flouring mill. One citizen is so anxious he offers \$100. for the first barrel of flour made there.

THE Milton, N. D., roller mill is now in the hands of the First National bank of Park River. Liabilities about \$33,000; assets \$12,000 to \$18,000.

GEORGE W. SPOTSWOOD has retired from the firm of Spottswood & Morgan, Riverside Mills, Nashville, Tenn., and the business will be continued by Calvin Morgan.

THE Marquette Valley Milling Company has been making improvements at its flouring mill at Marquette, Mich. The plant now has a capacity of 300 barrels per day.

THE Farmers Ginning and Milling Company, capital \$100,000, has been incorporated by Robert Goeking, J. H. Bailey and others, to erect a flouring mill at Cuero, Texas.

THE S. Y. Hyde Elevator Company of La Crosse, Wis., has been organized with a capital stock of \$200,000. The purpose of the company is to own and operate grain and produce elevators.

EDEN VALLEY, Minn., has contracted with Raiff Bros., of Owatonna, to build a mill. The Valley people give a bonus of \$3,000. The mill is to have a capacity of 125 to 175 bbls per day.

THE great mill and elevator of the Washburn-Crosby company at Great Falls, Mont., are nearing completion and the metallic covering for the outside of the building is now being put on.

COLORADO, Tex., will offer inducements to any energetic mill man who will locate a roller flouring mill there. G. H. Colvin, Secretary of the Chamber of Commerce, will furnish information.

WORK has begun on the flouring mill at Belton, Tex. The walls of the old mill will be used but the machinery and everything else will be new. The capacity will be one hundred barrels per day.

THE Washburn-Crosby Company will this year spend \$100,000 in im-

provements in the Washburn A mill, and build an elevator with a capacity of 1,000,000 bushels, the estimated cost of which is \$350,000.

JOHN RAMSETT, of the firm of Ramsett Bros. & Hill, proprietors of the Oak Grove, Minn., flour mill, was killed, March 16, by the blowing off of the safety valve. It is thought he was repairing the valve when the accident happened.

A PROPOSITION was presented recently to the Commercial Club, of Tacoma, Wash., by an eastern capitalist, who offers to put up a 100-barrel flouring mill at a cost of \$25,000, if the citizens of that place would subscribe for \$10,000 of the stock.

WALTER A. BRADY who was for fifteen years connected with the well known New York flour commission house of J. W. Moore, Le Duc & Co. as salesman on 'Change has made a connection with Neustadt & Co., Eastern Agents of the Daisy Roller Mill Co.

ON April 6 the flouring mill at Meredosia, Ill., blew up with a tremendous report, killing the engineer and doing much damage. The cause was a boiler explosion. The mill was an old one, but in good repair, capable of doing good work, and of large capacity.

ACCORDING to figures posted at Chicago, April 10, vessels which loaded at that port up to Saturday evening had on board 4,916,000 bushels of wheat, 3,330,000 bushels of corn, 492,000 bushels of oats and 406,000 bushels of flax seed—making a grand total of 9,144,000 bushels.

THE National Elevator, the largest in Wheaton, Minn., suddenly collapsed about noon, March 17 and about fifty thousand bushels of wheat spread out over the adjacent ground. Fortunately no one was in or near the building, when the collapse occurred. The loss will be heavy.

G. H. MCPHERREN has leased the Minto, N. D., roller mills to the North Dakota Milling Co., who will take possession on April 10, with John Montgomery, manager. Mr. McPherrren will look after things at the mill for a month or so, and then will attend to the interests of his farms.

H. A. PAINE, who has the contract for building the new flouring mill at Albert Lea, Minn., now in course of construction, fell from the elevator March 24, striking on his head and shoulders and sustaining very serious injuries. He was picked up in a bleeding condition and taken to his home.

THE committee appointed by the Farmers' County Alliance to investigate the proposition to establish a farmers' mill at Mapleton, Minn., have decided to go ahead with the enterprise. It was voted to make the capital stock \$25,000, to cover the cost of mill and elevator to be raised by shares of \$25 each.

At a meeting of business men of Aberdeen, S. D., held March 28, it was decided to organize an Interstate Wheat Palace Association with a view to holding a grand exhibition in connection with and after the state fair next fall. Committees were appointed on incorporation and ways and means.

L. M. Godley & Co., millers, having a plant valued at \$110,000, at Scottsville, N. Y., have stopped operations. The Merchants Bank, of Rochester, N. Y., has mortgages against the property amounting to \$50,000 and is the principal creditor. The firm did one of the largest flour mill businesses in that part of the country.

THE new mill of the Duluth Roller Mills company upon which work will soon be begun will be 70

by 140 feet in area and seven stories high. In addition to the main structure will be erected a warehouse, elevator and engine house. The warehouse will be 100 by 200 feet in area. The elevator will have a capacity of 250,000 bu. of grain.

THE Jeffrey Manufacturing Co., Columbus, Ohio, have in Machinery hall, Section No. 26, exhibits of their chain belting, elevating and conveying machinery. In the Mines and Mining Building, northeast section, ground floor, they show electric and compressed air mining machinery. They request that friends and patrons "Make our headquarters, yours."

THE Minnesota Senate passed the Duluth State Elevator bill by a large majority. It provides for an appropriation of \$200,000, all to come out of the grain inspection, in which there is now a surplus of about \$90,000. The balance will be raised by an increase of fee to 50 cents a car, and an elevator of 1,500,000 bushels capacity will be built by the State to be completed by Oct. 1, 1894.

FRANK WHITTEN was instantly killed March 28 at the Lincoln Flour Mill, Anoka, Minn. While overseeing repairs a driving belt caught while he was putting on a pulley, tearing out a lot of frame work. Whitten and the three men assisting him were knocked down, Whitten falling 12 feet to the floor below, his head being crushed. He was 35 years old and leaves a wife and two children.

THE stockholders of the recently organized Union Mill & Elevator Company, of Gallatin, Tenn., have closed contracts for the purchase of machinery and the construction of the buildings. Work will begin at once, and it is the purpose of the managers to have the mill running by harvest. The capacity of the elevator will be 75,000 bushels, and that of the output will be sixty barrels of flour per day.

THE contract has been let to the Nordyke & Marmon Company, of Indianapolis, to furnish the machinery for the recently constructed "People's Mill," at Pulaski, Tenn., owned by Ben. F. McGrew. The mill, which is a modern one in every respect, will be put in operation as soon as the machinery is placed, and will have a capacity of seventy-five barrels of flour and four hundred bushels of meal a day.

A STEAMER left Kansas City April 10 with the largest cargo of grain that has left Kansas City by water in many years. It consisted of 40,000 bushels and was shipped to Mexico by an all-water route, the grain being transferred at St. Louis and again at New Orleans. This will be the first time that grain has been shipped from Kansas City to Mexico in this manner, and the result of the experiment is awaited with great interest by those interested.

FRANK LACROSSE, of Pelican Lake, Minn., has made very radical and comprehensive improvements in his mill on the Cormorant river at that point. The mill was formerly run by water power, but the stream failed. Mr. LaCrosse then put in a steam plant. He had the old style machinery, however, and the mill was not a profitable enterprise. This winter he has taken out all of his old machinery and replaced it by the latest and most improved patterns.

ARTICLES of incorporation have been filed by the Superior Transfer Elevator Company. The capital stock will be \$75,000. The incorporators are E. C. Kennedy, P. M. Chandler and H. T. Fowler. Mr. Fowler is president, Mr. Chandler, secretary and general manager,

and E. M. Linton, of Minneapolis, treasurer. The elevator will have a capacity of 200,000 bu. and will be located at the proposed terminal yards in the South End. It is the purpose to clean wheat that is not in first class condition.

FRANK NICOLIN, the big miller of Jordan, Minn., made an assignment March 28 for the benefit of his creditors, naming Gerhard Hilgers as assignee. The assets and liabilities cannot be ascertained. Careful estimates of liabilities which include an estimate of 100,000 bushels of stored wheat, make the liabilities about \$120,000. The assets will be about \$70,000. The Merchants National Bank, of St. Paul is the heaviest creditor, holding paper to the amount of \$55,000.

WILLIAM PETERSON, of Chicago, shot and killed himself March 25, while kneeling at the graves of four of his children who are buried in Cave Hill cemetery, Louisville, Ky. He lived on the west side at Chicago, where he had a wife and six children. He was 65 years of age and was once engaged in the milling business in Louisville. He was confined in the Anchorage insane asylum near Louisville for one year. He arrived there the day before to visit his daughter, and it is thought the memories revived caused a fit of insanity.

The Northwest Flour and Shipping Company is the name of a corporation formed by a number of mill owners of Oregon and Washington. The capital stock is \$20,000, divided into 20,000 shares at \$1 per share. The mode of the division of stock is for each milling company to take four shares for each barrel of their daily capacity. About twenty mills are represented in the combine. The officers are A. J. McDaniel, of Portland, president; E. P. McDaniel, of Cove, Or., vice-president; W. S. Hurst, of Aurora, secretary and treasurer. The principal office is located at Portland.

THE Kansas City Times, of March 28, says: The destruction of the Kehlor mills at Litchfield, Ill., by an explosion due to mill dust last week may turn out greatly to Kansas City's gain. Work is being rushed to complete the new Rex mill, between Argentine and Toad-a-Loup, owned by Mr. J. B. M. Kehlor, as rapidly as possible. Mr. Kehlor desires to have the mills running up to their full capacity of 2,200 barrels per day by July 1. The new elevator, to hold 200,000 bushels of wheat, is also being rushed. It is understood to be the aim of the company to mass their business at Kansas City and not rebuild at Litchfield at all. Nothing will be known definitely of this, however, until the insurance losses are adjusted.

## DEATHS.

Hiram M. Northrup, of the firm of Northrup Bros., Kansas City, Kans., died at his home, March 24, aged 75 years.

Frederick Sherwood, a charter member of the New York Produce Exchange and prominently identified with the flour trade, died on Friday evening, March 31, at his home in Orange, N. J., aged 73.

The death was announced on the New York Produce Exchange, March 29, of J. W. Moore, of the late firm of J. W. Moore, Le Duc & Co., flour commission merchants. Mr. Moore was found dead in his bed at his home in Plainfield. He had been suffering from the grip which affected his heart.

SEND for a copy of the new edition of the "Riverside Cable Code." Address, Riverside Printing Co., Milwaukee, Wis.



ABSOLUTE FIRE PROTECTION.

A PROFITABLE INVESTMENT.

# The Grinnell Automatic Sprinkler

OVER 1400 FIRES EXTINGUISHED.

The National Milling Company's new mill at Toledo, O., equipped with the Grinnell Sprinkler system, is insured in first-class companies at less than 1½ per cent.

HOME OFFICE:

PROVIDENCE, R. I.

B. W. DAWLEY, General Western Agent,

PROVIDENCE STEAM AND GAS PIPE COMPANY,

115 MONROE STREET,

CHICAGO, ILL.

## FIRES.

At Newton, Ia., the large flour mill owned by John Wilson, was burned, March 30.

At Seaford, Del., April 13, the flour mill of Dr. Joseph A. Johns was burned. Loss, total; insurance, \$7,000.

At Hanover, O., April 8, the flouring mill of Hilleary & Hughes was burned. Loss, \$20,000, with \$3,000 insurance.

At Ligonier, Ind., April 3, fire destroyed the old Empire flouring mill on Pigeon road. Loss \$5,000; no insurance.

At Conesville, N. Y., March 17, the grist mill of L. P. Cole was burned, and 1,000 bushels of grain were destroyed. Loss \$4,000; partly insured.

At Richmond, Ky., April 3, the large flouring mill of J. C. Carroll & Co., caught fire, and the interior was destroyed. Loss \$15,000; partly insured.

At Seward, Neb., March 20, the flouring mills and elevator of Boyes, Dean & Co. were burned. Loss on buildings, \$20,000; flour and grain, \$10,000; insurance, \$7,500.

At Aldrich, Mo., March 15, the mill of the Aldrich Milling Co., together with its contents were burned. The loss amounts to about \$10,000. The plant was insured for \$6,500.

At Forest, Ont., April 7, McCahill & Co.'s flour mill was burned, with a storehouse containing 900 barrels of flour and 5,000 bushels of grain. Loss, \$24,000; insurance \$15,500.

At New Orleans, La., March 17, the cooperage of John Schott, No. 97 South Peters st., was burned. Loss on building \$6,000; insured. Loss on stock \$5,000; insured for \$1,500.

The grain elevator of F. W. Herline near Mapleton, N. D., was destroyed by fire April 11. It is reported that the house contained 45,000 bushels of wheat, and the fire caught in the engine room, though the power was furnished by a gasoline engine.

The Marion roller mill at Marion, S. D., was burned March 28, together with 6,000 bushels of wheat and four carloads of flour. The mill was owned and operated by Tyler & Co., and valued at \$20,000. Insurance on mill, \$6,000; on grain and flour, \$2,000.

At Falmouth, Ky., March 21, R. B. McDonald's distillery, mill, cooper shop, dwelling house and office were burned. The flouring mill was a new structure and was but recently put in operation. Loss, \$40,000; no insurance. Mr. McDonald will rebuild at once.

The Standard Flour Mills of Walla Walla, Wash., owned by W. S. McCalley, were totally destroyed by fire March 20. The loss including a small amount of flour and feed stuffs is \$25,000; insurance, \$12,000. The

fire is supposed to have started in a stove, in which a fire had been burning during the evening.

At Chicago, Ill., March 28, Frank Marshall's elevator, on the Wabash tracks, between Forty-fourth and Forty-sixth streets, was burned. It was stocked with 100,000 bushels of oats. The fire is supposed to have started from overheated machinery. Loss \$100,000; the loss on building and machinery being about half that amount. Building and contents were insured for about \$25,000.

The Kansas elevator, an old ramshackle building, situated on the Belt Line Railroad near the corner of Baird & Shawnee streets in Armourdale, Kans., burned March 20, with a loss on building and contents of from \$20,000 to \$24,000. The elevator had a capacity of 100,000 bushels, was owned by the Kansas Elevator Company and operated by A. S. Pierce.

The City Mills at Jordan, Minn., valued at \$130,000 was burned March 19. The building was six stories high, of stone, erected in 1879, and had a capacity of 600 barrels per day. There were 500 bushels of wheat and 50 barrels of flour in the mill at the time. By good work of the fire departments of Jordan and Shaska the elevator and 15,000 bushels of wheat were saved. Loss, \$100,000; insurance, \$56,000. The origin of the fire is unknown.

The fire loss of the United States and Canada as compiled from its daily files by the *Daily Commercial Bulletin*, New York, for March, amounts to the suggestive aggregate of \$16,662,350. The Boston blaze is responsible for \$3,250,000 of this heavy tax. The estimated loss by fire during the month of March for the past twelve years is as follows:

1892.....	\$7,000,000	1888.....	\$9,918,100
1893.....	7,250,000	1889.....	10,912,000
1894.....	8,250,000	1890.....	8,466,300
1895.....	9,040,000	1891.....	12,540,750
1896.....	10,450,000	1892.....	10,648,000
1897.....	10,450,000	1893.....	16,662,350

It will be readily seen that March, 1893, exceeds any other March in the above table even with the Boston loss taken out.

The following table shows the increase of fire loss during the first three months of 1893, as compared with same period in 1891 and 1892:

	1891.	1892.	1893.
January.....	\$11,280,000	\$12,564,000	\$17,938,400
February.....	9,220,500	11,914,000	9,919,900
March.....	12,540,750	10,648,000	16,662,350
Totals.....	\$32,998,150	\$35,126,000	\$44,510,650

The frequent and expensive fires occurring all over the United States are seriously alarming the fire underwriters, both American and British. It must not be supposed that this feeling is alone due to the Boston conflagration. Large manufacturing plants and mercantile establishments throughout the whole country have fallen prey to the flames in such numbers as to cost most of the insurance companies

much more than even their gross receipts so far this year. Were the expenses deducted a comparison of the net premiums received with the losses incurred would make an astonishing showing to those who are at present possessed with the idea that the fire insurance business is a profitable one to the corporations engaged in it.

Among the list of fires during March, involving a loss of \$10,000 and over, are the following:

Toledo, O., feed mill.....	\$12,000
Lebanon, Mo., roller flour mills.....	20,000
Jordan, Minn., flouring mill.....	130,000
Seward, Neb., flouring mills and elevator.....	30,000
Litchfield, Ill., flouring mill and elevator.....	670,000
Arkansas City, Ark., elevator, etc.....	100,000
Chicago, Ill., elevator.....	300,000
Marion, S. D., flour mill.....	26,000
Plainfield, N. J., grist mill.....	10,000
Newton, Ia., flour mill.....	45,000

## AUTOMATIC SPRINKLERS.

Chattanooga, Tenn., April 3, '93.

General Fire Extinguisher Co., Providence, R. I.:

GENTLEMEN—In reply to yours of the 30th ult., will state that on Dec. 24th, while the house was packed full of holiday customers an electric spark set fire to the goods in one of our large show windows, immediately after turning on the light. From all the evidence we can gather, the fire was almost instantly extinguished by the opening of one of the three heads of the sprinkler plant in the window, our establishment being equipped with the Grinnell Automatic Sprinkler apparatus. The damage was mainly by water, amounting to about \$450, which was paid by the insurance companies. We trust that we will not soon have a greater loss and are very well satisfied with the efficiency of our extinguisher.

Very truly yours,  
(Signed) D. B. LOVENAN & CO.

## RECENT MILLING PATENTS.

The following list of patents for Milling and Grain Handling Appliances, granted during the months of February and March, 1893, is especially reported for the UNITED STATES MILLER, by H. G. Underwood, Patent Attorney and Solicitor, 107 Wisconsin St., Milwaukee, Wis., who will send a copy of any patent named to any address for 25 cents: No. 491,344—Conveyor, Michael Garland, Bay City, Mich. No. 491,623—Grain Scouring machine, Rosia W. Welch, Baltimore, Md. No. 492,213—Grain Separator, Frank F. Landis, Waynesborough, Pa. No. 492,004—Grain Spout, Franklin B. Giesler, Milwaukee, Wis., assignor to the Galland-Henning Pneumatic Malting Drum Mfg. Co., same place. No. 492,720—Separator, John Frey, West Berkeley, Cal. Reissue 11,311—Centrifugal Separator, Philip M. Sharples, West

Chester, Pa., and David T. Sharples, Elgin, Ill.

No. 492,914—Flour Bolt, Myron W. Clark, Parma, Mich., assignor one-half to E. P. Allis Co., Milwaukee, Wis.

No. 492,795—Flour Bolt, William D. Gray, Milwaukee, Wis., assignor to E. P. Allis Co., same place.

No. 492,969—Flour Compound, William F. Putnam, Wellington, O. No. 492,879—Grain Conveyor, John B. Stoner, New York, N. Y.

No. 492,869—Rotating Grain Meter, Abraham B. Landis, Waynesborough, Pa.

No. 493,065 Grain Scourer, Archibald P. Campbell, Portage la Prairie, Can.

No. 493,164—Grinding Mill, Joseph Hunt, Allentown, Pa.

No. 493,504—Dust Collector, Elias W. Hoover, Chicago, Ill.

No. 493,565—Dust Collector, Heinrich Seck, Dresden, Germany.

No. 493,429—Grain Cleaner or Oat-Sifting Machine, Nathan B. Higbie, Chicago, Ill.

No. 493,451—Grain Cleaning Machine, Thomas A. Seip, Dayton, O., assignor one-half to P. B. Holly & C. A. Salzmann, Hamilton, O.

No. 493,603—Grain Scouring Machine, D. E. Sibley, Chicago, Ill.

No. 493,531—Machine for Grinding, Crushing or Disintegrating Grain, etc., Sidney Straker, London, Eng., assignor to the Central Cyclone Co., same place.

No. 493,772—Conveyor, Richard L. Hassell, Chicago, Ill.

No. 494,274—Pneumatic Conveyor, Henry C. Kelly Jr., Chicago, Ill.

No. 494,153—Carriage for Grain Spouts—Edward D. Mayo, Minneapolis, Minn., assignor one-half to the Barnett & Record Co., same place.

No. 494,290—Grain Separating Screen, Charles Clox and Jacob Clox, St. Ansgar, Ia.

No. 494,188—Feeder for Mills, Allen C. Branthingham, Indianapolis, Ind.

The following from Chicago Tribune, Feb. 14th:

## RAILWAY NOTES.

"The Louisville, New Albany & Chicago has just added to its rolling-stock, two new sleeping and boudoir cars, costing nearly \$45,000 each. These cars are said to be the finest ever placed on any road in the country, and are specially designed for use during the World's Columbian Exposition."

These cars are models of elegance and beauty, each Compartment and Boudoir being fitted with a complete toilet set, cleverly hidden from view when not in use. They are in daily service between Chicago and Cincinnati, and should be seen and used, to be fully appreciated.

All of the Monon's through day trains are made up of smoking cars, new coaches and Parlor and Dining Cars.



CHAS. D. COX, Manager.

MAXIMUM LINES. - - - \$170,000.00.

C. W. MEEKER, Ass't Manager.


**Western**  
**The Mutual Fire Ins. Co., New York.**  
 TOTAL CASH ASSETS, \$1,511,192.21.  
 NET CASH SURPLUS TO POLICY HOLDERS, \$861,376.55.  
**FIRE INSURANCE**  
 AT  
**MINIMUM RATES**  
 ON RISKS EQUIPPED WITH APPROVED SYSTEMS OF  
**AUTOMATIC SPRINKLERS.**

**The American Lloyds, New York.**  
 45 Underwriters, collectively representing \$25,000,000.00.  
 Underwriters all agree to abide by decision against any one underwriter.

TOTAL CASH ASSETS, \$235,692.13. NET CASH SURPLUS, \$214,308.63.

## The New York Fire Insurance Company, New York.

SELECTED RISKS ONLY.

226 and 228 La Salle Street,

CHICAGO.

### CROPS.

#### GOVERNMENT CROP REPORT.

Fairly Favorable Outlook in Nearly All States in the Union.

WASHINGTON, D. C., April 11.—The week has been unusually warm over the Southern States, the central valleys, the southern portion of the lake region and the middle Atlantic States. The week was slightly cooler than usual in the spring wheat region, including the greater portion of Minnesota and the Dakotas. It was cooler than usual throughout the Pacific coast and plateau regions. Reports indicate that there is a deficiency of moisture throughout the cotton region and the east portion of the winter wheat region, while there is an excess of moisture in the spring wheat region. The weather has been especially favorable for farm work, and corn and cotton planting is progressing. Special telegraphic reports are as follows:

Indiana—Weather favorable to all crops and farm work; wheat, clover and grasses wintered fairly well and but little damaged; fruit in promising condition, except peaches; farm work far advanced and oats nearly all sown.

Ohio—Wheat improved over Northern section; slightly hurt by high winds over the remainder of the state; oat seeding and potato planting nearly completed; plowing for corn in general progress; increased acreage of oats and corn.

Michigan—Weather favorable for crops; plowing is general and oat sowing in progress in southern section.

Wisconsin—Winter wheat, oats, clover and stock have seldom wintered better; plowing progressing and seeding done.

Minnesota—Seeding in north-west portion, where ground is covered with snow; seeding just begun in central portion; general in southern portion; winter wheat looks well.

Iowa—Season opens two weeks earlier than last year; small grain nearly all sown;

condition of winter wheat variable.

North Dakota—Plowing and seeding in west portion fairly started; ground too wet in east portion.

South Dakota—Wheat and oat sowing begun in north and general in south; season from ten to fifteen days late; seeding and general crop prospects excellent.

Kansas—Week favorable to spring work and all crops, except in the west, where much wheat and some oats and barley are not sprouted; corn planting in eastern counties.

Oklahoma—Great part of corn crop planted and coming up nicely; planting cotton and seeding wheat and oats.

Wyoming—Weather beneficial to rangers and winter grains.

Idaho—Ground covered with snow; spring late; general farm work will begin about the 20th; winter wheat in sight and looks well; acreage of crops will be increased.

Colorado—Season early; fruits, grasses and grain well advanced; farm crops being planted rapidly.

Arizona—Ranges suffering from drouth; irrigated crops doing well.

Utah—Six inches of snow have fallen in the Northern valley during the last three days; season late in north; very little spring work done at all.

Washington—But little seeding done yet and farm work almost suspended; fruit outlook very good.

Oregon—Season four weeks late; winter wheat doing well; spring slowly progressing; acreage increased.

California—Barley heading and hay being cut; strawberries marketing; prospects of other fruits and grains as good and better than other seasons for several years past; the state is covered with blooming fruits and flowers.

Pennsylvania—High, cold winds, snow and rain retarded growth in north counties. Wheat

froze out in places; rye fair; little farming done in southern counties; wheat good; potatoes being planted; plowing for corn progressing.

Mississippi—Corn planting completed; good stand; cotton planting progressing.

Arkansas—Corn about all planted and coming up to a good stand; cotton planting begun; small grains in fine condition; fruit prospect never better; farm work advanced more than the average.

Missouri—Work being pushed; grass looking fine; wheat promises poorly; plowing for corn commenced; oats sowing progressing; fruit prospects excellent.

Illinois—Wheat badly damaged; considerable being plowed under for oats; corn and oats seeding completed in central and southern portions and nearly completed in northern portion; fruit prospects good; some corn and potatoes planted; meadows and pastures good.

#### MICHIGAN WHEAT.

The Michigan crop report for April, issued from the office of the secretary of state April 9, says that the present outlook for wheat in Michigan is not promising. There had been no spring growth in April when the reports were made, hence no estimate of the percentage killed could be made. The fields were brown and did not look as well as immediately after the snow went off. Correspondents, almost without exception, report the crop in bad condition. The decline in appearance is due to high dry winds and lack of rain. The average condition in the southern counties is 81 per cent; in the central 91 per cent, and in the northern counties 93 per cent, comparison being with average years. In the southern counties the condition is 9 per cent lower than one year ago, and 16 per cent lower than 1891. Wheat made small growth in the fall and was in poor condition at the opening of winter. The average condition in the southern

counties Nov. 1 was 83 per cent. The low percentage was caused by dry weather and insects. Nearly 80 per cent of the correspondents in this section reported injury by insects. There was no improvement in November. The ground was covered with snow from about the middle of December to the early part of March. A thick coating of ice formed in February and covered the fields, but above the ice there was snow to the average depth of 12 inches on the 9th and nine inches on the 29th of the month. A heavy rain fell in the state April 2, but was followed on the 4th by a high, drying wind and did but little good. Another heavy rain with hail occurred on the night of the 6th and the weather since has been warm and favorable.

The total number of bushels of wheat reported marketed by farmers in March is 999,347, and the total number of bushels reported marketed in eight months from August to March inclusive is 11,530,270, which is 772,545 less than was reported marketed in the same months one year previous.

WERST, the crop expert, makes the following crop summary, under date of April 10, to P. D. Armour, for whom he has been traveling: "I have examined the winter wheat crop outlook in the States of Pennsylvania, Ohio and Indiana, and am of the opinion that the crop of these states will fall at least 25 per cent under last year. I think the shortage will be even greater than that, possibly one-third, but to be safe and conservative I call it 25 per cent. Of course the weather condition hereafter may possibly modify this, but my belief is that any change will be for the worse rather than for the better. I have visited and reported earlier in the season the States of Illinois, Missouri and Kansas, and from what I saw then and have learned since I believe that the shortage of the entire winter wheat crop of the United States will

be fully 25 per cent, and I believe it will be still greater.

THE North Dakota wheat raisers have great confidence in the crop of 1893. Notwithstanding the extremely low price of wheat, every acre that is possible to sow will be sown this year. The following is a conservative estimate of the number of acres to be cropped and the kind of grain to be planted: Wheat, 2,830,000 acres; oats, 425,000 acres; barley, 200,000 acres; corn, 12,000 acres; flax, 10,000 acres; millet, etc., 200,000 acres; potatoes, 20,000 acres; total 3,697,000 acres. There has been no time, except the present, during the last eight years, so far as the season is concerned, when the farmers felt encouraged to sow all their lands. The unprecedented fall of snow this winter insures the filling up again of the lakes and sloughs all over the state, and the general soaking of the ground. On the low lands seeding will no doubt be delayed on account of the excess of water, but the conditions generally warrant the belief in a wonderful crop for 1893.

The past week has not been all that could be desired for the winter wheat crop as a rule in West, although many districts have been favored with moisture and warmth and satisfactory advancement in growth. The larger portion of the area is deficient in moisture, and disappointments have widened, so that an unexpected extent of area is being abandoned to other crops. This is more notable in Illinois and Kansas than elsewhere. In Ohio the crop is in good average promise; in Indiana there is considerable of impairment, as also in Kentucky, with much of uncertainty in Michigan. A rather surprising feature is the frequency of reference in correspondence to liberal holdings of wheat in the interior. A reduction of 75,000,000 bushels in the winter portion of the wheat crop, if the spring crop should have a favorable outturn, would furnish an ample supply for the year, with the surplus on hand, to admit of an average volume of exportation. —Cincinnati "Price Current."

CROP reports from about fifty localities in Wisconsin are almost unanimous in stating that winter wheat promises to turn out exceedingly well. Wisconsin has been fortunate in this respect, because alternate freezing and thawing have done much damage to winter wheat in some portions of the Northwest. For this state, during the month of March, there was plenty of freezing but precious little thawing and this was an excellent thing for the wheat as

the heavy blanket of snow tended to protect the crops in the ground.

*Chicago Tribune*, March 24: Mr. Dodge, the crop statistician at Washington, is about to step down and out, leaving his place to be filled by another man. It may well be hoped that the new incumbent of the office will improve on the methods of his predecessor, and this may be done without too severely reflecting on the work of Mr. Dodge. Indeed, there is good reason to believe that he would have improved on himself had he been allowed to remain in office. His task was a difficult one and rendered a little more so than was absolutely needed from the fact that he attempted too much. He tried to obtain more precise results than the conditions warranted and then experienced grave difficulties in making later results harmonize with earlier ones. It might be well for the incoming official to inquire into the measure of precision which the crop statisticians of some other countries have been trying for and their admitted inability to attain it. If he does so he will find that the men who figure on English crops do not now expect their estimates to be correct within one or two per cent and sometimes they have appeared to be as much as three per cent wide of the mark.

THE *Mark Lane Express* of April 3, says: With April the ordinary and seasonable course of the year should bring us rain. Heavy downpours are not required, for the subsoil was refreshed in February. What is wanted is a series of showers to stimulate surface growth and wash away the dust which March winds have scattered over the blades of young grass and corn, and tender buds and shoots. Should a mild, sunny, and showery April be granted us, the agricultural outlook to the limited extent of actual promise of yield would be more favorable than for any year since 1887. We say a limited extent for with prices down to their present level even a yield of five quarters to the acre would not make all land pay, and a yield of four quarters to the acre for the whole cultivated area of wheat would still leave a loss. The exceptionally good seed bed and the early sowings should make 1893 a fine barley year, and here again a seasonable April is most important. Oats should hardly now be put in until there has been at least half an inch of rainfall, and it is to be feared that the hay crop will be late. It is far too soon, happily, for there to be any occasion to fear its being deficient.

English wheat begins the

fourth month of the year with the lowest price on record, and the average for the month just closed is profoundly discouraging.

	1893.	1892.
January.....	25 3	35 1
February.....	25 10	35 5
March.....	25 0	32 10

There is no gain in ignoring the fact that even in 1892, the year of excessive supplies beyond all record, value steadied just a little in March, when wants were still at a winter flow, and supply between winter and spring shipments at an ebb. In the past month supply has, as in 1892, been smaller than requirements. Granary reserves have fallen from 4,480,000 qrs. on New Year's Day to 3,775,000 qrs., being 705,000 qrs. relief in three months. Yet value has receded tenpence per qr., while last year, with less in its favor, it picked up fivepence per qr.

#### WEATHER CROP BULLETIN OF THE WISCONSIN WEATHER SERVICE.

[For week ending Tuesday, April 18, 1893.]

U. S. DEPT OF AGRICULTURE, }  
WEATHER BUREAU. }

Bulletin No. 1.

Snow fell in the latter part of November, and throughout the whole winter the crops in Wisconsin have been completely protected. No damage whatever has been caused by freezing and thawing, and winter wheat, rye and clover come out of winter quarters in fine condition and are now starting with a vigorous, healthy growth.

As the heavy snow covering was melted so gradually as to be greatly absorbed by the ground, as soon as the frost loosened its hold, plowing and seeding have progressed under very favorable conditions in the principal agricultural counties of the state, although the past week several nights of freezing temperature have caused a temporary suspension of work. Even with this slight drawback the season is about ten days earlier than usual. In the counties bordering on Upper Michigan some snow remains, and no seeding to speak of has been done in the north half of the state.

Stock has wintered well, and will now go out in thriving condition, with every prospect of rich spring pasturage. Such conditions ought to give considerable impetus to the dairy interests.

Meagre reports indicate that the cranberry vines have wintered well.

All told, Wisconsin presents a very clean bill of health at the opening of the crop season.

#### SOMETHING ABOUT BELTING.

There is a marked difference in the strength of a leather belt ascending as it is put on the pulley with its right or wrong side, says a writer in Wade's

*Fibre and Fabric*. On examining a hide just taken from the animal, there is the inner surface, or that which was next to the body, composed of flesh-like substance, fibrous in character, being rather longish than short: the other surface of the hide or outside is that which is covered by hair, which, when cut off, tanned, dressed and finished as a leather belt, is technically called the grain side: now if a belt be placed on a pulley so that its flesh side or surface is next to the metal surface, then the belt is placed in its weakest position. The grain side is the strongest for bearing tensile strains; notwithstanding these considerations, some authorities on belt driving actually advise the belt being placed grain side outward; those giving such advice must either have been ignorant of what constitutes the grain side of a belt or the mechanical law involved, for the smaller the pulley the greater the tensile strain thrown upon the outside portion of the belt; by placing the grain or hair side in contact with the pulley surface, we obtain more grip or adhesion, because the grain side is denser and more compact. By this arrangement at least 25 per cent more driving power can be obtained. A very common used palliative to prevent slip on small pulleys is resin. This at first no doubt seems to cure or greatly lessen the evil, but the adhesive properties of resin last only a short time, for the rapid and continuous running of the pulleys rubs part of the resin into the pores of the leather and polishes it on the surface, so that the belt becomes more smooth than before; this is not all, the leather pores, being filled with the resin, become brittle, the pulley surface is clogged with lumps, destroying uniformity of the surface, which is one of the essentials to good belt running. Pitch is sometimes used, which is simply temporary; printer's ink is considered a good dressing; but all such expedients are mere makeshifts, for at the best they are only partial cures. The common-sense way of preventing slip is really the only one object to which we ought to direct our attention; there is the relation of the pulley to the belt, the method of placing a belt on a pulley, the question of speed, tightness of belts, all of which, with other points, require careful consideration. Oak-tanned leather belts are best for general use. Cotton belts are best for dry places. Rubber belts are best for damp places. It is economy to put on a wider belt rather than a narrower one too tight. Vertical belts should only be moderately tight.



## Milwaukee Notes

DAVIDSON OPERA HOUSE—Every evening, Saturday and Sunday matinees.

BIJOU THEATRE—Every evening, Wednesday, Saturday and Sunday matinees.

ACADEMY OF MUSIC—Every evening and usual matinees.

STANDARD THEATRE—Every evening and usual matinees.

PEOPLE'S THEATRE—Every evening and usual matinees.

GERMAN STADT THEATRE Regular performances Wednesday and Sunday evenings.

LAYTON ART GALLERY—Free Tuesdays, Thursdays, Saturdays and Sundays. Admission 25 cents on Wednesdays and Fridays.

PUBLIC MUSEUM—Open daily. Exposition building.

The annual meeting for election of officers of the Chamber of Commerce, was held at noon on the 3d inst., at which a most gratifying report of the year's business was read by Secretary W. J. Langson. After the reading of the report a letter was read from the retiring president, E. P. Bacon, in which he reviewed the prosperous history of the Chamber of Commerce during the past ten years, and took occasion to thank the members for their uniform kindness during the two terms that he had occupied the position of president.

Not much interest was taken in the election, and but a small vote was cast. This lack of interest was owing to the fact that there was no opposition, and not to a lack of appreciation of the candidates or of the importance of the offices to be filled. The ticket elected, was made up as follows:

President—F. H. Magdeburg.  
Vice-Presidents—Cassius M. Paine and J. W. Bass.

Secretary and Treasurer—W. J. Langson.

Directors for three years—G. J. Zimmerman, A. C. Zinn and George W. Powers.

Board of Arbitration—A. C. Bodden, O. Z. Bartlett, James McAlpine, John F. Kern and John Foley, Jr.

Board of Appeals—C. F. Illey, E. Hotchkiss, Oscar Mohr, E. E. Lewis and C. Manegold, Jr.

Grain Inspector—F. L. Hinkley.

Official Weigher—F. F. Clapp.

PRESIDENT-ELECT MAGDEBURG, who is one of Milwaukee's well-known and active business men, and a leading miller, is at present in Europe on a pleasure and business trip. He left Milwaukee on February 3, and will sail for home on April 19. His trip includes brief sojourns in Germany, France, Holland and England.

This makes the twenty-eighth year that Mr. Langson has occupied the office of secretary.

SECOND VICE-PRESIDENT, J. W. BASS, in his remarks, following the election of officers, said he congratulated the body upon the evidences of material prosperity during the year just

closed. No failures had been recorded among members, and all, he understood, had accumulated wealth. He also congratulated the chamber upon the death of that great evil of legislation, the anti-option bill, and he said it was to be hoped, in the interest of both the farming community and the boards of trade, that the ghost of that ill-advised bill would never again appear. The bonds of mutual friendship and help certainly existed more strongly to-day than ever between the boards of trade in the country and the farming interests, and he thought that if ever chambers of commerce left their beaten tracks to enter politics, it should be to defeat political measures aimed at the farmer. There should be no antagonism between the two representative classes. In closing he promised an administration of liberality, and thanked the members for the honor which had been conferred upon him.

THE annual report of the board of directors, signed by J. H. Crittenden, states that the treasurer's report shows the following:

Income from all sources	\$28,946 80
Disbursements	25,406 80
Excess of income	\$3,540 20
Net balance from account of preceding year	1,679 37
Total surplus at close of fiscal year	\$5,219 57

In his letter Mr. Bacon referred to the fact that this occasion completed a ten years' period of continuous service as a member of the Board of Directors, and then continued:

The actual expenses of the chamber, exclusive of the weighing department, were \$15,109.62, and the net revenue \$14,311.90, showing an excess of expenses of \$797.72.

The operation of the weighingsystem under the complete control of the Chamber of Commerce, shows an excess of receipts over all expenses of \$4,337.92.

The gratuity fund shows an increase of \$7,000 in the invested fund, counting the securities held at their face value, the amount being \$84,000 against \$77,000 a year ago.

It was announced on 'Change, March 30, that the supervising of weighing out of elevators to wagons would begin April 1, and that the fee for such service would be 40 cents per 1,000 bushels, but that no charge would be less than 25 cents. It was also announced that the fee for supervising the weighing out of elevators to cars had been reduced from 50 to 40 cents per car.

THE stock of wheat here on the 15th inst. was reported at 2,100,097 bushels against 387,750 bushels the corresponding day last year.

For the four weeks ending April 15, the average output of flour, by the city mills, has been 42,000 bbls. per week.

MILLSTUFFS are steady, sacked

bran being quoted \$11.50 and middlings at \$12.00.

ON 'Change, April 15, wheat opened quiet at 87½¢ for July and sold at 87¾¢ and down to 86¾¢. Cables were easier in tone, and prices in some cases lower. The visible supply showed a decrease for the week of 1,195,000 bushels. At the same time there was an increase in the amount on passage to Europe of 1,048,000, showing a net decrease of about 1,500,000 bus. The movements of the clique did not make their presence felt to-day until toward the close, and the market was controlled entirely by the trading of the crowd. After the recent heavy decline a reaction ought naturally to be in order, but the uncertainty in regard to financial matters and a rather stiff money market make those bullishly-inclined rather timid. May wheat ruled 3¾¢ under July and fresh receipts 3½¢ under, September was traded in at 2¢ over July.

The close was steady. July, 87¼¢; May, 84½¢.

Sample wheat quiet. No. 2 spring on track, 65¢; No. 3 do. 55¢@63¢; No. 4 do, 58¢@60¢; No. 1 Northern do. 72¢; No. 2 do, 68¢@70¢; No. 2 hard winter do, 66¢.

### DIFFICULTIES OF CROP REPORTING.

It may be set down as an almost absolute rule in connection with general crop estimates based on local reports that they can safely be discounted before giving them to the public. Close observers hardly need to be told that when an excessive yield is reported the final figures are apt to fall within the average limit set by statisticians, and, on the other hand, that the great shortages almost invariably foot up more nearly to the general average than advance figures promise.

To illustrate, special damage to the wheat plant in scattered districts in the late winter or early spring months is usually heralded as a certain indication of a coming short crop; while it not infrequently happens that such occurrences are followed by average yields. It is only fair to say, though, that a modification of early estimates is generally more necessary in connection with supposed "short" crops than when indications point to an opposite outcome. This arises from the tendency seemingly inherent in everybody to magnify calamity more than prosperity.

No one can fully realize just how difficult it is to report crop prospects of even a limited district correctly until he has tried it and personally encountered the difficulties standing in the way of such work. The expected "half crop" from a given township frequently turns out

to be a "two-thirders," while an expected yield of the latter dimensions is often a full average at harvest. At best there is a vast deal of conjecture in all this work, and when all the conditions surrounding crop reporting are taken into consideration it must be admitted that it is attended with a wonderful approximation to accuracy in the outcome.—National Stockman.

### THE WORLD'S FAIR.

Extortion at the Exposition.

H. N. HIGINBOTHAM, president of the World's Columbian Exposition, has issued a manifesto to the public, touching charges, now being so freely circulated, to the effect that all kinds of extortion are to be permitted at the Exposition. This is a matter of such grave importance that we give the statement the greatest possible prominence. It runs as follows:

WORLD'S COLUMBIAN EXPOSITION, CHICAGO, March 25, 1893.

To the Public.—Because of the many misrepresentations and mis-statements relative to exposition management and affairs being in circulation through the press and otherwise, both in this country and abroad; and in reply to many letters of inquiry or complaint touching the same matters, it seems advisable that some official statement regarding them should be made to the public. Therefore, I respectfully ask that the widest publicity be given to the following facts:

First—The Exposition will be opened in readiness for visitors on May 1.

Second—An abundance of drinking water, the best supplied to any great city in the world, will be provided free to all. The report that a charge would be made for drinking water probably arose from the fact that Hygea water can also be had by those who desire it at 1 cent a glass.

Third—Ample provision for seating will be made without charge.

Fourth—About 1,000 toilet rooms and closets will be located at convenient points in the buildings and about the grounds, and they will be absolutely free to the public. This is as large a number in proportion to the estimated attendance as has ever been provided in any exposition. In addition to these there will also be nearly an equal number of lavatories and toilet rooms of a costly and handsome character, as exhibits, for the use of which a charge of 5 cents will be made.

Fifth—The admission fee of 50 cents will entitle the visitors to see and enter all the exposition buildings, inspect the exhibits, and, in short to see everything within the Exposition grounds, except the Esquimaux village and the reproduction of Colorado cliff dwellings. For these, as well as for the special attractions on Midway Plaisance, a small fee will be charged.

Sixth—Imposition or extortion of any kind will not be tolerated.

Seventh—Free medical and emergency hospital services is provided on the grounds by the Exposition management.

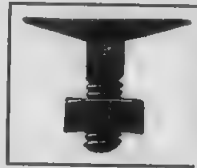
Eighth—The bureau of public comfort will provide commodious free waiting rooms, including spacious ladies parlor and toilet rooms in various parts of the grounds.

H. N. HIGINBOTHAM,  
President.

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## AN EXPENSIVE ERROR.

A correspondent writes to *Fire & Water* as follows: A common rat was the cause of a \$15,000 fire in our neighboring town, Tipton, Ind., one day recently. The rat was taking his morning inventory of the engine room of the mill, and being noticed by the engineer, was the target for a well meant but badly aimed club, which missed the rat and struck a high-pressure gas pipe, breaking it and filling the room at once with gas. Shutting off the furnace fires, the engineer sought the shut-off just outside the mill, but before that was reached a tremendous explosion occurred hurling the engine house into the air, followed by a rush of flame that instantly enveloped the mill. Having no fire protection worth mentioning the mill was destroyed with several thousand bushel of wheat. Unnecessary to say the rat escaped.

Tipton has been talking water-works for a long time, but has now concluded to get to work and call an election, which no doubt will result favorably. If so, the rat should be immortalized with a monument, as he will be the immediate cause of the water-works. This is the third fire for Mr Nickey within four years, and no insurance either time. He will rebuild and insure too.

Kokomo is not in altogether as pleasant a position as it might be in case the unexpected should happen. The chairman of the fire committee, a self conceited little mortal, having a grudge against the only engineer in the department, pestered him like a gad-fly does a horse, resulting in the engineer's resignation. As a result, the two steamers are without anyone to care for them, none of the men in the department being engineers, and now in case the water-works should fail, or a call should be sent in from out of reach of the hydrant service, a chase over town for an engineer will have to be made. Taken altogether, the situation is not as flattering for property owners as it might be. Some of Kokomo's Solons have much to learn yet in fire matters.

## A NOVEL GRAIN DISCHARGER.

A novel and very interesting machine is now in use at the Millwall docks, London, for the discharge of cargoes of grain in bulk, the principle applied being the removal of the grain by the creation of a strong current of air. The machine is erected on a barge which is placed alongside the ship to be operated upon. To the machine is attached one end of each of six five-inch flexible pipes, the other end of each of which is carried

into the hold or holds of the vessel and immersed a few inches in the grain. The engine is then started and the grain immediately flows at the rate of one hundred tons an hour through the pipes into receivers, whence it falls by gravity into weighing machines, and then, again by gravity into the craft sent by buyers to receive it. The machine in use has a power of one hundred tons per hour, but the work done can be increased indefinitely by the addition of a corresponding engine-power. The six pipes are worked together, but when necessary more or less of them can be shut off, and the rate of discharge is then reduced, but not in proportion to the number of pipes detached. With one pipe only in use, the power exercised carries 38 tons an hour through it.—*Transport.*

## WHEAT CROPS OF THE WORLD.—

From the data gathered it appears that the wheat crop of the world has been persistently underestimated by overlooking obscure countries which in the aggregate have a considerable production. The average crop of the world for the ten years, 1881 to 1890, is 2,280,856,715 bu., of which 1,873,000,000 bu. is officially estimated by the various producing countries. The remarkable fact is brought out that the world's production of

these principal cereals is in about the same volume, the average for corn being about 2,300,000,000 bu. and of oats 2,328,170,885 bu. The United States grows about 18 per cent of the wheat, but in the case of corn this proportion is 80 per cent, and in years of plenty our own crop nearly equals the world's average. The rye crop of Europe is larger than the wheat crop, and more than one-half of it is grown in Russia, where it is the national bread grain. Outside of Europe this grain is grown in only two countries, the United States and Japan, and the production of each is about the same. The record of wool presents some surprising and highly gratifying features.—*Chicago Inter-Ocean.*

The paper of the milling firm of Crocker, Fiske & Co., of Minneapolis, went to protest, April 3. Several causes are given for the embarrassment of the firm, among which are illegitimate wheat speculations by one of the partners, stringency in the money market, depression in the milling business, etc. A meeting of the creditors was held on the 13th inst., but what transpired thereat was not made known to the public. It is understood that the affairs of the firm will be adjusted, and that an assignment will be avoided if possible.

# PATENTS

## FOR INVENTIONS.

Equal with the interest of those having claims against the government is that of INVENTORS, who often lose the benefit of valuable inventions because of the incompetency or inattention of the attorneys employed to obtain their patents. Too much care cannot be exercised in employing competent and reliable solicitors to procure patents, for the value of a patent depends greatly, if not entirely, upon the care and skill of the attorney.

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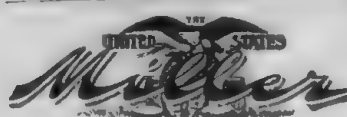


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MILWAUKEE, APRIL, 1893.

We respectfully request our readers when they write to persons or firms advertising in this paper, to mention that their advertisement was seen in the UNITED STATES MILLER. You will thereby oblige not only this paper, but the advertisers.

## Editorial.

THE attention of millers, desiring to establish an eastern agency for their productions, is called to an advertisement in this issue under the heading of "Agency Wanted."

THE suits brought against several prominent millers by Mr. Wm E. Lee, involves the validity of Patent No. 153,874, issued October 13, 1874, on Seed Separator, and which has expired by limitation of time, since Oct 13, 1891.

WE acknowledge receipt of a copy of "The Russian Famine of 1891 and 1892," a pamphlet of 74 pages giving a history of the relief movement in connection with the Russian famine and the action therein taken by the millers of this country as prepared by the editor of the Northwestern Miller. The work is very neatly prepared and contains many fine illustrations. Published by the Millers & Manufacturers Insurance Co. of Minneapolis.

THE Prinz & Rau Mfg. Co., of Milwaukee, are well satisfied with the present condition of trade and regard the future outlook as very promising. Among their recent orders for Cackle Machines are: four of the largest size to do the work in one-half of the Pillsbury "A" mill at Minneapolis and one of the largest size, ordered by the Hecker-Jones-Jewell Milling Co., of New York, to be placed in the Hecker mill. Parties will find it to their interest to consult with the Prinz & Rau Mfg. Co., whose advertisement appears

in this issue, when about to purchase machinery of this kind.

THE attention of our readers, particularly those interested, in any manner, in Elevator Buckets, is called to the advertisement of Samuel Hall's Son, New York, which appears in this issue. The offer to send a sample of the bolt manufactured, free to applicants, is good evidence of the confidence had in their superiority. Send for one and judge for yourselves, bearing in mind the words used in their announcement "The best are always the cheapest."

NOTICE of the first annual meeting of the National Association of Operative Millers will be found on another page of this issue. It is hoped there will be a good attendance, as a cordial invitation is given to all operative and head millers, and matters of great importance will be brought before the meeting requiring the careful consideration of experience and wisdom, toward reaching prudent and beneficial results. Let every one who possibly can do so, attend, prepared to aid the good cause in its commendable efforts.

THE item relative to exports of breadstuffs, compiled from the advance statement issued by the U. S. Bureau of Statistics, shows a very marked decrease, as compared with late preceding years. In the item of wheat flour, however, we are pleased to find an appreciative increase in amount exported for the nine months ending March 31, 1893 as compared with corresponding period in 1892, the amount of increase being 641,356 barrels. The sale of the manufactured article is what we want in preference to that of the raw material.

INDICATIONS point strongly toward the revelation of much misery and want among what are termed the lower or laboring classes of European countries, in the near future. It only requires the action of investigation in some locality, made prominent by extreme destitution, to give impetus to a general wail of suffering, held back by pride and the knowledge that the cry for relief will surely be started, of a necessity, from some source, when the suffering multitude can add their voices without the odium of being the starters. One of the indications, as appearing to the observing of this country, is the marked decrease in the amount of breadstuffs exported by the United States. There can be no doubt as to the re-

quirements of consumers being fully equal to if not greater than in the past years but that the wherewith to purchase our food products is lacking seems evident. The true state of affairs in matters of this kind never become public by voluntariness. A few cases of actual extreme suffering come to the knowledge of the public through the press and investigation of the cited cases brings to light a state of affairs in general which sets the world of plenty and comfort to work for the alleviation of their less fortunate fellow-beings—a work which the people of this country have cheerfully undertaken and accomplished, whether appealed to or not, whenever the knowledge of necessity has been obtained.

A BURNT child dreads the fire," is an old and trite saying. The child learns, from its first experience, that severe punishment follows every attempt to meddle with burning embers. If he does not get the experience by practical illustration, in blistered fingers, but gets on without being burned, he is a wise child; but if, after the first burn, he, for the second or even the third time suffers the penalty of recklessness, in fact, ignores the painful result of each experience, he is considered a foolish child—not very bright. This applies equally well to the miller of the present day, who will persist in consigning his flour, just as soon as his regular trade, if he has any, begins to "slack up." This slacking up of trade is a warning which should be heeded, and either the output reduced or the mill closed down. When orders begin to drop off the reason therefor can easily be surmised—the market is supplied with more than it can digest comfortably—it is sick—the feasting must be followed by fasting. Overlooking it, at this stage, by consignments, only aggravates the case—it wants a rest. The considerate miller will act accordingly, but the majority rush the surplus forward, overload the consignee, who finds the buyers with full stocks, the property goes into store, charges accumulate, etc., etc. Millers, with possibly a rare exception, know how it terminates, still, they keep at it, notwithstanding they are "burned," time after time, in the way of heavy reclamations. Worse than the foolish child, as they are warned by their own experience, not only "seven times, but seventy times seven." We venture the assertion that 75 per cent of the millers of the United States, that do an export business in flour, were lured on by the seemingly low prices of wheat and freights, prevailing

last fall, to making large consignments of flour to foreign markets, until hundreds of thousands of sacks were accumulated in European warehouses and much of it is there to-day.

In many instances, the drafts made against those consignments were for from 75 to 80 per cent of their value when shipped, and he is a fortunate miller if margin drafts have not been drawn on him for from 25 to 50 per cent of the amount advanced by the consignee, to make good the decline in values and carrying charges.

Not only is the actual loss to the miller very great, but the results which accrue from this unfortunate way of doing business are even greater than the actual loss on the shipments, by reason of the market being glutted, which generally produces continued reduction in prices, until an extreme is reached—low prices ruling for a much longer period than would otherwise have been the case, if the miller had exercised the wisdom of the fire-dreading child.

The foreign flour circulars, which come to us, all tell the same story of dull markets—"large stocks prevent an advance being made"—"market is overloaded"—"the depression in our market continues"—etc., etc.

Had these consigning millers that have, again and again, gone through this same experience, kept their flour at home (if the mill must run continually, profit or no profit) and fed it out on regular sales, the market would have been sustained, the miller would have had a voice in making the price, and the outcome would have been an early resumption of trade at better prices for flour.

We believe a good business can be secured to a mill by consigning regularly to a trade which it can, in a measure, control. We have one such case in mind, but this was only secured by constantly keeping the flour on the market, at all times, for regular customers, until now the entire output is consigned. But it is, more particularly, to spasmodic consignments that the overloaded markets are indebted for most of the demoralization that is produced, and from which the shipper is most liable to suffer, as he invariably finds the balance on the wrong side, for which the consignee has made sight draft to balance. Like the old toper, he "swears off"—"turns over a new leaf"—but the next dull season finds the experience repeated, with the same results.

Verily, it seems as if a "Trust" or other equally effective resort is the only means whereby the miller is to be saved from his own unbusiness-like methods.

## Correspondence.

[The following letters are all from our own special correspondents, and reflect their views and the views of the trade in the location from which they write.]

## NEW YORK.

**A Slight Improvement in the Flour Market The Bad Condition of the Trade and its Causes—Minneapolis Losing her Supremacy Lake Superior and New York Mills Taking Her Trade Forced Sale of Consigned Flour in England—Causes of Trouble Among Northwestern Millers.**

THERE has been a slight improvement in the flour trade, the past month, both in demand for and prices of Winter and high grade Spring, while medium and low grade Springs have been neglected, weak and lower, when salable at all, either for home or export trade. Yet the improvement has been only near the close with the Winter killing boom in wheat and, from easier prices than a month ago, during the last half of March. Since then, the volume of trade however, has lessened, as it increased early in the month owing to slight concessions from prices current a month since. For the past two weeks, therefore, we have had stupidly dull markets, especially in export grades, the only exception being in low grades of Winter and straight Winter and Spring patents, which were taken more freely in the last week at old prices to 5@10c advance on the advance in wheat; the latter advance, however, was only paid in extreme cases for certain brands and for superfine and No. 2 Winter. Thus there is nothing of importance in the flour trade to record for the month, except that the minimum price farce was abandoned early in the month by the Spring wheat millers, on the plea that they were to "suspend" it until the new Daisy mill at Superior should come into the combine, it having started since that was formed, and taken more than its share of the trade here in Spring patents at a cut under the minimum. This mill, with the exception of Freeman's new Superior mill, has been about the only one that has been doing much in the past four weeks, the latter for export largely and the former for home trade.

The other big Duluth mill, the Imperial, has made the second change in its New York agency within a year—Watts, Duryea & Co., giving place to the mill's former eastern agent, who is to make headquarters here and represent this mill alone. Their business has been interrupted by the change. Although these Duluth mills and flour are steadily encroaching on the older Minneapolis mills, with which they more than compete, at the same, or better prices,

though less known, except for such Minneapolis brands as have a special reputation, on which the trade runs, because the retail trade requires "Point," yet it is an undisputed fact that Minneapolis is still losing her former supremacy, as she has been for the past year or two, or since our city mills as well as those of Duluth began to encroach upon her field. The reasons are plain, chief of which is the quality of her flour, compared with that of her new competitors, for the fancy family trade of the east. There has been a great deal of complaint among the grocery trade, the past two years, that their customers do not like Spring patents as well as formerly, as the flour seems to be bolted too fine, like powder dust, and lacks its former strength, even for bread making, while it is almost impossible to use it for pastry. Both these objections have been overcome by our city mills, whose "blended" patents, made of No. 2 Winter and No. 1 Northern or No. 1 Hard Spring wheat, can be used equally well for bread or pastry, thus making it unnecessary to keep two kinds of flour in the house, namely, Spring patent for bread and Winter patent for pastry, beside getting a stronger as well as whiter flour in the blended city patents. The Duluth flours are also preferred to the Minneapolis, because they are stronger than the Minneapolis, and do not seem to be bolted so fine, being more like the old time Spring patents, when such a thing as a 40 per cent patent was not unknown, and 80 per cent patents had not been heard of. It is claimed for both the city and Duluth mills that they make a much smaller per cent of patents than other mills; and, so far as the city mills are concerned this is no doubt true, for their chief demand is for West India clears, of strength and color superior to either the Spring or Winter clears, for which they commanded 25c to 50c per bbl. more than either of the other clears. Hence they have the smallest per cent of patents of any mills in the country, while they can select in this market the best wheat from all sections of the country and use such proportions of each as produce the best results, from year to year as the crops of the different sections vary in quality. On the part of the Duluth mills, it is also claimed that they draw their wheat from the best Springs, or Hard wheat sections of the Northwest, such as Minneapolis can no longer get, except at extra expense, since the Hard wheat belt is receding further Northward each year, leaving Minneapolis to draw the bulk of

her supplies from the older and semi-exhausted wheat belt of Minnesota, which now chiefly produces No. 1 Northern instead of No. 1 Hard wheat as formerly. That this claim of the Duluth and Superior millers is correct, there is little question, as the sudden popularity of their flour seems to prove, whether they have refused to go into the 80 per cent patent competition, to lower their standard of quality or not.

The above conclusions refer only to the home trade. But whether the effects of the causes just explained are at the bottom of the depression in Spring wheat flours, in the English markets, can only be inferred from the fact that this depression is chiefly confined to these flours, and the other fact that the bulk of them have been shipped by the merchant mills of the Northwest, the majority of which are located at Minneapolis. It is this depression that has almost entirely shut off new export business the last two weeks, and culminated in forced sales of large amounts of consigned stock, by order of English banks that had loaned money thereon, until the accumulations of unsold flour were so great that they not only refused to loan consignees more money to take up acceptances against shipments, as they fell due, but called in what they had already loaned, before the approach of warm weather would still further reduce its quality. Two such consignments have recently been closed out in this manner, and another in Dublin, while there are other such cases rumored in other centres of distribution in Great Britain. Yet a most significant fact is, that, during this same period, there have been very fair sales of city, Superior and Michigan patents and Kansas straights, made for those same markets at old prices, and also of special brands of Minneapolis patent. But Bakers' Spring wheat extras, the chief export goods, in former times, have been almost unsalable here, in sacks, as well as bbls, at prices continually declining, as they are so poor, after 80 per cent patent has been taken out, that our city bakers, whose name they still bear, because of their former popularity in that trade, refuse to use them at nearly \$2.00 per bbl. under the price of patents or \$2.65 @ 2.85 for standard to choice brands, in bbls, against \$4.35 @ 4.50 for standard to choice patents, whereas, the difference was only 50c per bbl., as late as two years ago, when they brought almost as much in sacks as in bbls., for export, and could not be got as fast as wanted on the other side.

It can scarcely be that such

a revolution has been effected in our export as well as home trade, in the short period of two years, unless there is a good reason for it; and one for which our Spring wheat millers are responsible, in good part; else why do our city and Winter wheat mills do more export trade than formerly, while our spring wheat mills can only sell their patents at home or abroad, except at a great discount under Winter low, and medium grades, which have been scarce all this crop, while medium and low Spring have been a glut, except at under \$2.00 for export for feed? Strange it is indeed, that this great revolution in the flour trade has occurred since the Spring wheat millers of this country went into this 80 per cent patent business, following the lead of Minneapolis, which claims the credit of "reducing flour milling to a science." Can it be that they have also "reduced" their standard of quality, at the same time, and also reduced the demand for their flour, until the present condition of the trade is the result, when neither profit nor nonimpairment of capital can much longer be maintained, except by those mills most favorably located and of the most improved construction? It is this condition of the trade that has caused the failure or embarrassment of several mills in the Northwest of late and is liable to cause more; for it is on them chiefly that the losses from these forced sales on the other side have fallen and on whom more still must fall, unless the reported damage to the Winter wheat crop, shall prove true and serious enough to put up wheat and pull flour with it. In fact, it is to these losses that the recent troubles among Western millers, are credited here, as well as to the other fact that these same mills, which were heavily long, here and on the other side, of unsold flour, have, in many cases, if not generally, sold May wheat "short" in Chicago as a "hedge" and got badly caught both ways, as their long flour has gone down and their short wheat gone up, on the corner in May wheat.

New York, April 10, 1893.

## BUFFALO.

THE way in which the Northwestern Tea Pot boiled over and scalded our beloved James, caused a ripple of excitement among millers. The claim that Mr. James was of the loins of that old lady, paralyzed not only him, but those who have always supposed he was a self-made man. It's astonishing how people are mistaken sometimes. Never mind, Astute Roarback James, Esq., will look into the case later on



—when the old lady has imbibed sufficiently of the cup that cheers. And, gentlemen, that will be a lull before the storm.

Of all the tall lying in connection with grain and flour, Buffalo hard wheat dealers have kicked the beam during the past week or two. No. 1 Northern was held at 76c in Buffalo and it could not be budged at a fraction less. At the same time Rochester millers were getting all they wanted from dealers here, and not paying above 75c. Several of our millers who usually buy on the ground floor were done for and did not discover the trick until it was too late to kick. Hard wheat sellers in Buffalo have been cutting each other's wind pipes for many years, to get the Rochester business, but it is noticeable that Messrs. Whitney & Gibson have held their own against all comers. It does not take the Rochester miller long to discover the games of some of our wheat dealers, but in the meantime he takes advantage of the fight. After it is over he is always the gainer and then quietly goes back to his first love.

The stock of Duluth wheat at this port is getting down to the bottom of the bin. The total amount on April 15 was 985,000 bushels, half of which is owned by millers here. This is about 200,000 bush. more than last year. The chances are good for a late opening, some vessel owners putting the first arrival as late as May 15. In that case the stock here would be exhausted if the present rate of decrease continues, and there is nothing to prevent it.

Messrs. Spann & Chandler, the largest barley dealers in western New York, have undertaken that stupendous task of collecting damages from a canal boat owner. The firm shipped 38,000 bushels of barley by canal for New York on November 25. Several loads were delivered, but one boatman, whose residence was in Rochester, claimed he could not proceed further than that city on account of ice, and conveniently laid up there. The firm sued for \$1,500 damages for non-fulfillment of contract. The jury disagreed, as is always the case when the "poor canaler" is brought to book. It was clearly proven that the boatman preferred to hold his load in Rochester. What the grain trade wants is an association similar to the millers' for protection against the canaler.

At this writing there is little movement in shipping. A few vessels have been taken to load coal, but the docks are as void of life as at almost any time this winter. The ice is thick outside, and there are miles and miles of it. The usual scare of a blockade when the

grain fleet arrives, comes from upper lake ports, particularly Cleveland. There is no necessity for it. The seven or nine million bushels will be taken care of without the least trouble, as the elevating association is prepared to meet just such emergency. There is practically 13,000,000 bus. storage capacity in Buffalo, and as a very large amount of this grain has been contracted by canal vessels, it will not all be forced to railroad houses. This has been the chief cause of trouble. Give the canal a chance and Buffalo is able to keep any amount of stuff moving. For warders are anxiously watching the ice and hoping the canal authorities will open the canal before vessels can get through, so as to allow boats now at New York to reach Buffalo before the rush.

Gradually the mills at Black Rock are being converted into elevators, only the Queen City, owned by Messrs. Harvey & Henry, remains to tell the tale of water power in the vicinity of Buffalo. Their failure to compete with steam mills was predicted 20 years ago, and it is safe to say they have not been a paying investment for the past 10 years at least. The Frontier mill, owned by Schoellkopf & Mathews, has been sold and will be turned into an elevator as soon as possible. The machinery, which has been kept in excellent condition and repair, will be taken out. Gordon W. Hall, of Lockport, is the new owner, and it is said he paid \$25,000. The Ryan elevator, which is next to it, sold at \$11,000. The Queen City mill is claimed to be worth considerably more than the Frontier, but will never be turned into an elevator at the present price asked for it. Whether it will pay Mr. Hall remains to be seen. In the humble opinion of your correspondent it will not. Mr. George T. Chester has ordered the walls of his burned mill at Lockport, torn down. Mr. Chester has evidently given up the idea of rebuilding this mill. There is no money in a modern mill on that site.

The rate on grain from Buffalo to New York is 13c per 100 lbs., according to agents, but you can ship for much less and it is predicted that before the canal opens it will drop to six cents. Still the roads are not as greedy for grain freight this year as they were last, and it is highly possible that they will give up their intention to make grass grow in the bed of the canal.

Capt. DePuy, the "canalers' friend," has another bill before the legislature to reduce rates of elevating grain to nothing. This man is either a fool or a dangerous individual to be at large. It puzzles the best

canal men to make him out. Everybody knows his running mate, Capt. Bill Clark, except the poor boatman, whom he regularly bleeds on the pretense that he is protecting their interest when, in fact, he is the worst enemy they have. The best friend of the canal to-day is the elevating association, but you can't make the bull-headed canaler believe it.

The Duluth Imperial mill has pulled up stakes on the Tift farm docks, and sold their warehouses to the Reading company. Last season this flour company brought a large quantity of its product to this port in tramp steamers, ignoring the line vessels and added insult to injury by shipping it on canal boats to New York. At the time this was done the UNITED STATES MILLER published the fact, stating also that the railroad company would put the screws on and make it hot for the millers, as other roads had done in like cases. It appears now that the Reading road began to charge \$2.50 per car switching, although a contract is reported to have been made with the millers that this should be free. This is as near to a true statement of the difficulty as the public is allowed to know, but there is evidently something else at the bottom. Agent Flatley will go on the road and the regular freight houses will take care of the flour, so it is said.

Last year the canal carried 9,000 bbls. of flour and perhaps this season the Northwestern mills will give that route a more thorough trial.

The most influential paper in Buffalo prints the following, concerning one of our Buffalo firms and the beauty of it is that is all "dead right."

#### FAIR DEALING.

It gives Buffalo grain dealers great pleasure to occasionally see their work appreciated. A buyer from Utica related the following incident of fair dealing on 'Change the other day which came under his notice through connection with a Little Falls mill.

It appears that the miller at Little Falls purchased of Heinold & Rodebaugh 4 cars of feed and not having sufficient storage capacity ordered the firm here to hold back one car until advised to ship. This was four months ago and the fact that he had a car coming to him had entirely escaped his memory. When a fresh order for bran was received the old car was sent, much to the surprise of the miller, as prices had advanced \$4.50 per ton.

"There are few houses in the trade," says the gentleman, "who would have filled that order as promptly as they did after the market was a clear \$4.50 per ton against them, and it shows what we in that section have always claimed for them: Honest dealing, quick to rectify errors and always living up to contracts."

Flour has been quiet during the past month. An occasional sale is made to New York but it is hard work to move it at any fair price. The best spring

patents are quoted at \$5.45@5.55, and winter \$3.90@4.00.

Millfeed has been steadily declining. The supply is light and the demand fair. Coarse winter bran, bulk, is not quotable above \$16.00; do. spring \$15.00; fine white feed \$17.00 per ton.

Chief Inspector Conway W. Ball has returned from Florida much pleased with the South. Capt. George Wride, owner of the Niagara elevators, who was down there at the same time, says "the Northern people go down to Florida for change and rest; the niggers get the change and the hotel-keeper the rest."

A few of our rich and enterprising monied men have purchased a square on Main street and will erect an eleven story building thereon. Mr. George Urban is one of the directors.

Mr. Riley Pratt is the "Corn King" of the Buffalo Exchange. He has, for the past six months, been running the corn trade to suit himself. Mr. Pratt is one of the shrewdest men in the building and has gained the friendship and respect of his associates, as well as traders in this market.

The Arcade, built by Messrs. Mathews & Smith, is completed and ready for tenants. It is a model structure and the first of its kind erected in this city. The interior arrangements and finish are the best and finest to be found in the state.

Mr. C. E. Angle, of the Moseley & Motley mill at Rochester, has been elected a member of the Buffalo Exchange.

For sometime past Messrs. Heinold & Rodebaugh who, in addition to their grain trade, have built up a business in millfeed entitling them to a front rank among handlers of that commodity, have felt the need of a western connection, bringing them into closer touch with western mills and enabling them to extend their field of operations over a much larger territory. To this end they have entered into an arrangement with Mr. Alexander Mann, of this city. For a number of years Mr. Mann has represented some of the largest milling concerns in the west, and has therefore a wide acquaintance and an experience in the trade, especially fitting him for his new position. Mr. Mann leaves this week to open offices at Duluth and Superior. His many friends, while regretting his departure from Buffalo, will join in wishing him a full measure of success in his western venture. I take pleasure in recommending Messrs. Heinold, Rodebaugh & Mann to the people of the twin cities at the head of Lake Superior, as first class business men, in every way worthy of confidence and esteem.

The opening canal rate on wheat is 5c, and 4½c on corn to New York. It is impossible to get a straight rate by rail, but 6¾ is thought would be accepted for shipments until the opening of navigation when, of course, there will be the usual drop to meet the water route.

The great Pan-American millers trust has gone the way of all things human. Not even the wonderful executive ability and hypnotic persuasive powers of Don Rinaldo Hubbard, of Mankato, and our own James, could convince the sod corn gentlemen of the country mills that it was to their interest to maintain uniform prices with big mills. That notice over the door of a country storekeeper in Minnesota comes in pat:

"To trust is to bust; to bust is hell,  
No trust, no bust, no hell."

The millers can now console themselves with the thought that, as there is no trust, there will be no hell. Had the trust been formed some of them would, no doubt, have experienced the rest of the jingle. Rectifying the evils and abuses of the trade, seems to have been made a secondary consideration to gratifying the desires of certain individuals to make prices for the entire milling fraternity.

The "tall" millers of Buffalo have recently sent out a new hanger, as an advertisement of their wares, which is a veritable work of art. It would take too much space to give an idea of the exquisite coloring, but a description of the subject, as in the case of all rare paintings, is an easy task. In the foreground is a tier of flour, bearing the widely famed brands, "World's Best," "King," "Moss Rose," etc., while on the left appears Francis Joseph Henry, in the costume of an ancient knight, mounted upon a panoplied steed, spear in hand, charging the flour barrels like Sancho Panza of old riding at the wind mills. This lets another side light in upon the chaplain's character and makes him appear somewhat like a latter-day clerk of Copmanhurst.

The German-American Bank is steadily gaining in favor with the Board of Trade men. It was a wise move putting Mr. George Sandrock (the people's George) at the head of that institution.

The nestor of Buffalo millers, Mr. Thomas Thornton, of Thornton & Chester, although nearly 80 years of age, can be found at his office as regularly as the youngest man in the building. Canadian barley dealers haven't got through shouting for Grover Cleveland yet, and believe the duty on that cereal will be taken off immediately. How he will fool them.

TAURUS.

BUFFALO, N. Y., April 10, '93.

## MINNEAPOLIS.

THE stock of wheat in store today is as follows:

No. 1 Hard	bushels.	25,701
No. 1 Northern		9,083,416
No. 2 "		337,405
No. 3 "		35,100
Rejected		7,414
Special Bln.		1,008,910
No Grade		15,325
Total		11,394,461
Decrease past week		161,598

Our wheat market since my last letter has again broken the record of low prices, May wheat selling at 62½¢@82¾¢, the lowest price ever known for that option in this market. One cause of weakness here was the buying in of some "hedgers" against cash wheat holdings by our elevator companies, and placing them in this market. The cause of this action has been the manipulation by the bull clique in Chicago, which at one time caused May, in the latter market, to sell 17½¢ per bushel over the same future here. Armour has been a large buyer of cash wheat in this market for shipment to Chicago, taking, probably, in the neighborhood of four million bushels. Some of this was guaranteed by the sellers to grade No. 2 Chicago, and as much of it failed to pass inspection and was graded No. 3, charges have been freely made of "undue influence" on the part of the "clique" with the Chicago inspection department. However true this may be, it is an undoubted fact that the standard of our own No. 1 Northern this year was lowered to accommodate the poorer quality of the crop. A poor policy for any market to pursue, that desires to retain the confidence of eastern buyers.

Take it all in all, the lot of the elevator companies has not been a happy one this season. Their purchases have been made in the country on about half the usual margin under Minneapolis and Duluth prices. In many cases they have paid the farmer No. 1 Northern prices for wheat that graded No. 2 on its arrival here, and with their hedges out in Chicago, a market that, like Banquo's ghost, "would not down," with their holdings of cash wheat showing a 10@15c decline, the profits in this year's business will appear as if looking through the large end of a telescope. The lesson learned from this state of affairs, as indicated in my last month's letter, is to sell against their elevator stocks in this market and Duluth, where deliveries can be made beyond peradventure. Another source of annoyance, this business has had to submit to, has been the idiotic legislation of our state legislature. "The Peterson grain bill," which has just been passed, and signed by our governor to take effect Aug. 1, places all country elevators under the control of the State

Warehouse and Grain Commissioners. A Minneapolis elevator man remarks that "the law would be a bad thing for a man with the good grain and a good thing for the man with the bad grain. It provides that the terminal elevator shall give the farmer the grade of grain which his certificate calls for. Suppose, for instance, that Smith ships to Duluth a high grade of No. 1 Northern and Jones ships in a low grade. There might be a difference of 2 cents a bushel in the two lots, if sold by sample, as much of the grain is, but at the elevator the grade is all alike, and the good wheat of the one farmer may be mixed with the poorer wheat of the other, and the mixture delivered alike to the two men, one of whom had a great deal better wheat than the other. Or the elevator men might hold out the good wheat and supplant it with poorer grain, so long as the grade is the same. There is too wide a range in the grades to make the law practical."

The main provisions of the bill seem important enough to outline in this article, and are as follows:

First—It makes all elevators and warehouses on the right of way of the railroads, public elevators, under charge and supervision of the state board of railroad and warehouse commissioners, to be operated only under license issued by that board. They have full power to investigate all complaints as to unfair treatment or discrimination.

Second—In all cases of dispute between the buyer and the seller as to grade, weights or dockage of grain, a sample is to be sent to the state inspector, whose decision on these points is to be final and conclusive to all parties at interest.

Third—The seller is given the option of two competitive markets, by a provision that he may demand a receipt upon delivery of grain calling for a redelivery of a like quality of grain free of charge, less reasonable cost, for storage at the local point; or a terminal order calling for same quantity and quality of grain upon demand at a designated terminal, less cost of storage and transportation; or by amendment of Senator Donnelly, delivery may be demanded to a state elevator or elevators at Duluth, if such are built.

Fourth—Pooling as to prices and profits as to elevators at local points is stringently prohibited.

Spring wheat seeding has commenced in South Dakota and Southern Minnesota, and the conditions everywhere seem favorable. There is plenty of moisture in the ground, and in a week or ten days more, with favorable weather, seeding will be general all over the Northwest. Terminal elevator facilities are to be increased in Minneapolis this season to the extent of about 3,000,000 bushels, including a million bushel house to be erected by the Washburn-Crosby company, contiguous to and for the use of their large milling plant. This firm also intend increasing the capacity of their A. mill

from 10,000 bbls. per day to 11,000 bbls., which will cost fully \$100,000.

Our wheat market has ruled firm for the past few days, with a good milling demand for cash wheat, No. 1 Northern selling ½¢@1c over May, the Armour purchases creating the firmness in this grade.

The output of the mills was somewhat smaller last week, being 163,700 bbls., against 187,000 bbls. the week previous, and 183,900 bbls. the same week a year ago. The water power is now ample, and all the mills now running are using water exclusively. The flour market has been exceedingly dull, but shows a little improvement the past few days, probably owing to the stronger tone to wheat markets and reports of damage to winter wheat.

Quotations are as follows: \$3.50@4.00 for first patents, \$3.30@3.50 for second patents, \$2@2.40 for fancy and export bakers', \$1.15@1.45 for low grades in bags, including red dog.

Bran is selling at \$8.50@9 on track; common shorts, \$9@10; fine shorts, \$10.50@11.

G. W. S.

MINNEAPOLIS, April 10, 1893.

## DULUTH.

At a Standstill.

AFFAIRS at the head of the lakes, so far as manufacturing and selling flour is concerned, are as nearly at a standstill as mill men would care to see them. The Imperial mill run but one day last week, and but one of the Gill & Wright mills was running at a leisurely jog. The general stagnation and unsatisfactory prices for flour offer but little inducement for the mills to run at all. The mills on the other side of the bay have been running more or less regularly during the month and have shipped the output. The railroads accumulate flour in transit slowly for lake shipment. The market both for flour and millstuffs, is stagnant, and millers are feeling their way along, waiting for the long expected activity. The following report of the Board of Trade shows the production, shipments and quantity of flour in store by the mills at the head of the lakes, and the receipts and shipments and amount in store by the several railroads for the week ended Saturday last:

Mills	Product'd	Shipp'd	In Store
Duluth, bbls.....	5,108	9,723	31,053
Superior, bbls.....	21,148	21,148	None
Total, bbls....	26,256	30,871	31,053

Name of Rail- road	Receiv'd	Shipp'd	In Store
St. P. & D.....	6,870	None	51,179
Northern Pacific	2,250	None	11,550
Eastern Minn.	4,191	None	22,891
C. M. St. P. & O. None	None	None	250
Totals.....	13,311	None	85,900

The same reports gives the stock of grain in store at



Duluth for the week ending April 8, as follows:

	Bushels
No. 1 Hard wheat.....	980,848
No. 2 Northern wheat.....	13,430,538
No. 2 Northern wheat.....	1,978,683
No. 3 spring wheat.....	187,154
No grade spring wheat.....	87,821
Rejected and Condemned wheat.....	64,717
Special bin wheat.....	107,367
Total wheat in store.....	16,706,010
Afloat in harbor.....	571,100
Aggregate.....	17,277,110
Increase during the week.....	173,500
In store & afloat th a date last y'r.....	13,531,554
Increase for the week last year.....	1,202,320
Stock of corn now in store.....	341,341
Stock of corn during the week.....	unchgd
Stock of barley now in store.....	5,170
Stock of barley during the week.....	unchgd
Stock of rye now in store.....	17,548
Stock of rye during the week.....	unchgd
Stock of flax seed now in store.....	164,455
Stock of flax seed afloat in harbor.....	61,638
Stock of flax seed during the week.....	unchgd
Wheat in store at Minneapolis.....	11,384,464
Decrease wheat at Minneapolis.....	164,508
Corn in store at Minneapolis.....	1,0,053
Oats in store at Minneapolis.....	30,385
Flax seed in store at Minneapolis.....	23,572
Barley in store at Minneapolis.....	72,160

The visible supply of wheat for the week ending April 8, 1893, shows a decrease of 361,000 bus. as against and increase of 141,000 bus. for the corresponding week last year, and a decrease of 140,000 bus. for the corresponding week in 1891.

Corn shows a decrease of 401,000 bus. as compared with a decrease of 553,000 bus. for the corresponding week last year, and a decrease of 324,000 bus. for corresponding week in 1891.

Oats shows a decrease of 115,000 bus. as compared with a decrease of 489,000 bus. for the corresponding week last year, and a decrease of 483,000 bus. for same week in 1891.

While there is always more or less depending on the opening of navigation, there is, this spring, unusual interest in the matter, especially since it is evident that the opening will be later than usual. It is believed that there will be a brightening up all along the line as soon as flour and wheat begin to move down the lakes. Charters are being made for tonnage at 3 cents, some 2,000,000 bushels having been contracted at that figure, not including the amount that is lying in hulls in the harbor. The boats which figure are chiefly those owned by iron ore men. Most of the lake craft which will arrive here on the opening are now loading on Lake Erie for Chicago. They will then return for cargoes for Duluth or come here direct from Chicago. There will be a heavy movement of grain as soon as navigation opens. The grain fleet at present in the Duluth harbor is as follows: Str. J. B. Colgate, 84,450 bushels wheat; str. Thos. Wilson, 85,000 bushels; barge 115, 77,000 bush.; barge 118, 85,000 bush.; barge 109, 76,000 bush.; str. Columbia, 47,000 bush.; str. Rust, 33,000 bush.; sch. Barnes, 33,000 bush.; sch. Alta, 40,000 bush.; str. James Fisk, Jr., 30,496 bushels flax seed. Total, 571,100 bushels wheat and 64,496 bushels flax seed. At present the outlook is that it will be later than May 1 when boats will arrive and

depart from Duluth. Ice is from two to three feet thick in the harbor, and the lake is frozen over for a distance of 40 miles from Duluth. A strong southwest wind may loosen up the ice at any time, but as the prevailing winds are from the northeast the ice is liable to drift back and pile up in the bay. For the past ten years boats have arrived in Duluth from below on dates as follows:

1883	May 11	Empire State
1884	May 12	India
1886	May 15	Hecia
1888	May 5	Arizona
1887	May 8	Vanderbilt
1888	May 12	Mecosta
1889	April 20	Oscola
1890	April 23	R. L. Fry
1891	April 30	Livingston
1892	May 1	Panther

Rates from Duluth and Superior by rail to the sea board will undoubtedly undergo revision as soon as there is a movement by lake. At present the Duluth, South Shore & Atlantic carries the great bulk of the flour east. But a small per cent of the out-put finds a market in the south and southwest, the freight rates from the head of the lakes on flour and mill-stuffs is shown in the following table in cents per 100 pounds:

Duluth to—	All-rail.	Across lake.
New York.....	37½	35½
Boston.....	39½	37½
Philadelphia.....	35½	33½
Albany, and Troy, N. Y.....	36½	34½
Rochester, N. Y.....	31	29
Buffalo, N. Y.....	27½	25½
Baltimore.....	34½	32½
Montreal.....	37½	35½
Kingston, Ont.....	36½	34½
Pittsburg, Pa.....	27½	25½
Chicago.....	12½	10½
Detroit.....	24½	22½
New Orleans.....	37½	35½
Reading, Pa.....	32½	30½
Harrisburg, Pa.....	32½	30½
Cincinnati.....	22½	20½
Toledo.....	21½	19½
Cleveland.....	21½	19½
Indianapolis.....	21½	19½
Peoria, Ill.....	12½	10½
Omaha, Neb.....	23	21
Des Moines.....	22½	20½

During the present month Duluth has been selling some cheap wheat, in fact some of the cheapest cash wheat in the country. As showing how the market has ruled the following figures are given of the close for each day of last week:

	Cash.	On track.	McK.	Apr.	May.	July.
Monday.....	63½	66½	63½	67½	67½	70½
Tuesday.....	63½	66	63½	67½	67½	70½
Wednesday.....	62½	65	62½	66	66	69½
Thursday.....	62½	65	62½	66	66	69½
Friday.....	62	64½	62	65½	65½	68½
Saturday.....	62	64½	62	65½	65½	68½

During the early part of the month the story was current that the Duluth grain men by forming a combination with Armour, of Chicago, put themselves in a position to tweak the noses of the May clique in Chicago. Armour's agent, E. M. Higgins, it was alleged, bought 2,000,000 bushels of wheat in Minneapolis and 3,000,000 bushels here for rail delivery in Chicago against the day of reckoning. The story was elaborate in detail with the exception of explaining how this flank movement of wheat was going to pass the Chicago inspection. With the markets 15c apart, and freight from the head of the lakes 7 to 10 cents, it would seem that the scheme is feasible, provided the storage

capacity is found and the wheat will pass the Chicago inspection.

The multiplicity of legislative elevator bills seeking to establish elevators at public expense in Duluth have finally been killed off, as it was confidently predicted in these columns they would be, and the grangers will send their wheat to the corporation elevators as heretofore. The schemes were all utopian—on a par with the "plot" of Jg. Donnelly's "Golden Bottle"—and showed but little vitality when brought in review before the critical judgment of the house. The legislature of North Dakota has passed its \$100,000 elevator bill for an elevator at Duluth or Superior, but the measure is made inoperative by a clause which requires the state in which the elevator is erected to cede to North Dakota absolute civil jurisdiction over the elevator premises and property. Of course neither state will do this, and the bill might as well have "died in the bornin'." So, after all the legislative agitation by the grangers from the wheat belt, business will be continued by the old methods at the elevators and mills here, and the written and unwritten law of commerce will govern.

The Duluth board of trade, at a special election held for that purpose, has decided to sell its present block and build a new one to meet the requirements of the greatly increased and increasing business. The Board of Trade building is now located on Superior street, the principal business street paralleling the lake, and the new block will be erected on the northwest corner of Third avenue west and First street. It is the intention of the board to commence work on the new building early this spring, and finish it as soon as possible. It will be one of the finest structures in the city. The undertaking evidences the great vitality and resources of the board, which is already one of the strongest commercial organizations in the northwest. The outlook for future trade at this point is very encouraging, indicating that Duluth will, in a short time, be the greatest wheat depot in the world. There is now here about 18,000,000 bushels of wheat to go forward on the opening of navigation, to transport which will require 300 vessels of 60,000 bushels each, and, of course, as rapidly as the elevators are emptied, they will be refilled, until the country elevators and the Dakota bins are exhausted. The receipts of wheat will be lively after storage is provided, and business in the mills and on the lakes is resumed.

The much discussed matter of wheat inspection at Superior, as to whether it should be done

under Wisconsin or Minnesota rules, has been definitely and finally settled. The Minnesota inspection will prevail and it is understood that the Superior Board of Trade will temporarily suspend and that the grain business at the head of the lakes will fall into its old-time accustomed groove. Superior naturally desired to handle grain under rules and regulations of her own, but the strong country demand for Minnesota inspection prevailed and the little commercial ripple between the two cities has disappeared.

Coal charters are being made out of Cleveland for Duluth at 50 cents, and a large fleet is expected as soon as the ice is out. The boats will return with wheat.

There are sixty-two tugs in the harbor owned by Duluth men. Several of the ferries and small craft will go to Chicago for the season.

It is officially reported here that the elevator capacity at Port Arthur and Fort William is 4,000,000 bushels. At the latter point a 7,000,000-bushel elevator is to be erected this season by the Canadian Pacific. This will be up among the largest elevators in the world.

Secretary Thompson, of the Chamber of Commerce, recently delivered his speech on deep water-ways to a St. Paul audience. It was well received; the secretary's arguments on this subject are sound.

The weather at the head of the lakes is spring-like, and all along the line preparations are going forward for an unusually busy season in the mills and marine circles—it will be a year of extraordinary activity in the production of flour. H. F. J.

DULUTH, April 14.

## SUPERIOR.

Business Reviving.

THE unusually sharp municipal campaign is off, the dead and discomfited have been cared for and the wheels of general business are running again as if nothing had happened. The end of the dull season is approaching, when with the movement by water, there will be inaugurated a season which will prove a record breaker in every department of commerce. The wonderful growth of rail and lake traffic at this port which has sprung up during the past few years will be capped by the business of the present year. Everything points to this fact. It is much easier to determine in advance this season than usual the volume of rail and lake business that will pass over the docks of this city during the next seven or eight months. It is conceded everywhere, that on account of the unusual passenger business by

rail, everything in the freight line will be diverted to the lakes that possibly can be, and the amount of western grain or other commodity that goes east except by water will be small. The total coal shipment to the city last year was a trifle over one million tons, and local agents are figuring on 1,700,000 tons for the present year. As to the flour and grain trade, a local freight superintendent, speaking of the matter, said: "We anticipate a very satisfactory increase of rail and lake traffic the coming season. Flour for lake shipment is coming in steadily at the rate of from five to six thousand barrels per day, and we are anxiously awaiting the opening of navigation. An important factor in the trade at this port this season will be the Anchor line fleet of eight boats. Another important arrangement, made too late to be of any advantage to Superior last fall, is the deal whereby the Lehigh Valley Transportation line will deliver to the Great Northern railroad at this port all its freight for the west. Much of this trade has gone through Chicago heretofore. In addition to the large amount of coal that will come to Superior, there are other encouraging features. The elevators have between eight and nine million bushels of wheat in store and the flour production will be second only to Minneapolis. This commodity of flour is an entirely new feature and the increase for shipment is pure gain for the receipts, for the exports from Minneapolis are not liable to grow less for a year or two, at least. Chicago as a lake port has the advantage of location over Superior by about two trips from Buffalo each season—one trip in the spring and one trip in the fall, after navigation on Lake Superior has closed. There are now about 5,000,000 bushels of wheat afloat in Chicago ready for transportation to Buffalo. Superior will unquestionably ship more grain this season than ever before in a single year. If the new crop is an average one and is marketed early the shipment will be unprecedented.

The production, receipts and shipments of flour, and the receipts and shipments of grain at the head of the lakes during March as compared with the same month in 1892, were as follows:

RECEIPTS.		
Flour produced, Duluth, barrels.....	1893.	1892.
Flour produced, Superior, barrels.....	63,371	61,580
Flour received, barrels.....	50,013	
Wheat received, bushels.....	41,988	119,086
Barley received, bushels.....	1,142,463	3,844,584
Flax received, bushels.....	976	25,135
SHIPMENTS.		
Flour from Duluth, lbs.....	63,602	63,561
Flour from Superior, lbs.....	52,077	
Wheat, bushels.....	19,692	119,362
Barley, bushels.....		38,444
Flax seed, bushels.....		2,321

Our neighbors across the bay, for reasons which are not readily apparent, have indulged in a hereditary propensity to jibe at Superior because of the temporary postponement of operations on the Board of Trade. Their jubilating exuberance is both unkind and uncalled for. The Superior Board of Trade is not dead, but on the contrary will by and by, be doing business in their splendid block in the midst of the largest grain elevators in the country. This city has now the greater proportion of the grain, flouring mills and shipping business in cereals at the head of the lakes, and when all the mills and plants that are planned have gone into operation, Superior will have greater mill and elevator capacity than any city in the country. It is not in good form to poke fun at a city with such prospects of assured realization; when this wheat is here, there will be trading and commission men and a Board of Trade and, we hope, a broader and more generous view of trade, generally, than is exhibited by the gentlemen along the crags on the Minnesota side.

The long discussion as to Wisconsin or Minnesota inspection has been closed. At a recent meeting of the Board of Trade the following letter was received from the secretary of the railroad and warehouse commission of Minnesota:

"Following our letter of the 13th in reply to yours of the 11th, wherein you express it as the desire of your board of directors that offices for inspection and weighing and registration be established at Superior, we beg leave to say that we should be pleased to grant your request in so far as to extend such facilities as would enable the members of the board or any person interested in grain shipments and receipts at West Superior or Superior to secure prompt and complete information in regard to weighing and inspection of grain at this point and thus obviate the necessity for securing such information from Duluth as in the past. For this purpose a branch office can be established at West Superior for the issuance of certificates of weighing and inspection of Superior grain and for the cancellation and registration of warehouse receipts. The main office of weighing and inspection would necessarily under the law remain at Duluth and all work performed at Superior pertaining to the department would have to be controlled by those in charge of the several offices in Duluth.

"Your request that the officials of the state located at Duluth shall be required to report to your board of trade daily all statistics of grain received on track, inspected in store, etc., and that the statistics of Duluth and Superior shall hereafter be kept separate is regarded as reasonable and we will endeavor to meet your views in the matter."

A motion to discharge the Superior Board of Trade inspectors and weighers at the end of the present month was adopted. Active operations will probably not be resumed on the board until next fall.

The Listman Mill Co. still ex-

pects to begin grinding in the first part of May. Wm. Listman, of La Crosse, was recently here looking over the fine new plant and directing as to finishing touches. He stated that they have about fifty men at work and that the mill is nearing completion very rapidly. The principal brand turned out by this mill will be known as the "Marvel," the same as the brand from the La Crosse mill. Mr. Listman apprehends no trouble in finding a market for all the flour that will be turned out by the mill.

The proposition of North Dakota to establish an elevator at the head of the lakes—at Superior—if the Wisconsin legislature would cede five acres for a site, giving North Dakota civil jurisdiction over the territory thus ceded, has caused more merriment and wonder at the childlike simplicity of the Dakota grangers, than serious attention. A bill introduced in the legislature to release civil jurisdiction over the site was promptly killed, while in Minnesota the same proposition, striking a granger stratum in the legislature passed one house. The scheme is looked upon here as without merit from any point of view.

Contractor McQueen, who built the mines and mining buildings at the World's fair, and the Beach hotel for Leland, of Chicago, is now permanently located at the East end, and is figuring on the new flour exchange building to go up on the corner of Fifth and Becker streets. Bids have already been submitted for the stone work.

Heretofore Superior has been looked upon as a summertown—a city in which business was generally suspended after navigation closed, but, however this may have been, the establishment here of all these mills and elevators will make of it a town through which a large volume of business will flow the year round. As figured by a local railroad man the mills will require, when they are all in full operation, from 150 to 175 cars per day, so that the movement of wheat to Superior will not stop when the ice forms on the lake, but instead, the receipts will be continuous.

In about ten days all the commercial coal in the city will have been loaded out. Flour is coming in slowly, and the only road that is delivering wheat in any considerable quantity is the Northern Pacific, all of which is going to Duluth now that the Superior elevators are filled. Railway traffic is naturally affected to a certain extent, and will be until after the opening of navigation.

During the present week the grain market has been the subject of considerable manipula-

tion. Prices, brought about by several causes, have been a trifle higher and firmer. The feeling here that the Chicago clique intends to put May wheat up to \$1 is causing a slow response and a bullish tendency.

Manager Hurd, of the Lake Superior mills, has been visiting in Milwaukee during the week.

Wheat charters were made last week to Buffalo for 3¼c., and later charters have been made at 3 cents. Several vessels have been engaged at that to come direct from Lake Erie ports as soon as the Soo is free from ice. The first charters for the year were made March 11, three vessels, at 3¼c. Engagements to carry hard coal to Duluth and Superior have been made, at 50c per ton. Several weeks ago, Kingston charters were made, at 5½c. on wheat, the vessel to pay canal tolls. The nominal rate now is 5@5¼c. The Port Arthur-Buffalo rate on early charters was 3½c. It is now nominally lower. Most of the Port Arthur wheat is shipped to Kingston. Charters early in the season were made at 5½c.

A frightful accident occurred at the Belt line elevator Tuesday of last week. Five carpenters, at work on a scaffold suspended by ropes 60 feet from the ground, gave way. Henry Patriquin was killed, and the others bruised and mangled.

The packers at the Lake Superior mill went on strike a few days ago, demanding an advance of from 25 to 50 cents a day more. Their demands were not granted and their places were filled. The men at the Freeman mill also walked out causing the mill to shut down several days. New men have been secured and the mill is again in operation. J. F. H.

SUPERIOR, April 15.

THE Chicago Trade Bulletin, says: "There is considerable discussion in the leading wheat markets relative to the quality of wheat. While prices at Chicago are relatively higher than at most western points, it should be understood that our standard of grading is higher, and the quality of the wheat superior to that of markets, where prices rule lower. The inspection in the state of Illinois is entirely under the control of the State authorities—is virtually an independent inspection and free from the influences of either buyer or seller. Merchants in foreign markets are well aware of this fact, and orders for wheat direct attest this fact. A glance at the quotations for wheat in our market will disclose the fact that good No. 3 wheat is selling at about the same price as No. 2 in many other Western markets.

## WE HAVE OUTSTRIPPED EUROPE.

The United States has Become the Greatest Manufacturing Country.

R. H. Edmonds, a journalist of Baltimore, one of the most eminent authorities on the conditions of recent progress in the United States, contributes to *Engineering Magazine* an interesting and valuable paper entitled "A Decade of Marvelous Progress," from which a few conclusions are extracted:

The United States is now the leading manufacturing country in the world. We have far outstripped all other nations in the magnitude of our industrial operations. It is almost incomprehensible that in ten years the increase in capital invested in manufactures should exceed the total invested only twenty years ago. The value of our manufactured products increased about 60 per cent; add 60 per cent to the output of 1890 and we would have \$13,700,000,000 in 1900—but that is too much to expect. The rate of growth in mining interests in this decade as in the last would make our mineral output in 1900 nearly \$1,200,000,000, while a smaller percentage of gain, only equaling in volume the total increase in 1890 over 1880, would bring the figures to over \$950,000,000. If our coal miners add to the output of 1890 as many tons as they added to that of 1880, ignoring in this the percentage of growth, 217,000,000 tons will be produced in 1900. No other country in the world ever advanced in population and wealth as the United States is doing. The progress of the past shows no signs of halting. In fact, the development of our foreign and domestic trade and commerce and of our industrial interests is steadily broadening out.

Contrast our position and condition with Europe, with resources surpassing those of all Europe, with wealth creating possibilities in soil, minerals, timber, and climate unequalled by Europe, and practically without limit to their profitable utilization, with a homogeneous population of 65,000,000 people untroubled by the arbitrary regulations of half a dozen different governments and free from the drain of standing armies, the United States justly commands the wonder and admiration of the world.

Great Britain is no longer the manufacturing center of the world, for we have taken the foremost position in that line. Its vast iron and steel business is yearly increasing in cost of production, while ours is decreasing. It cannot meet the world's growing demand for iron and steel because it cannot increase its production to any great extent. It produces less pig iron now than it did ten years ago. Much of its ore it

imports from distant countries. Its cotton is all imported. It spends about \$750,000,000 a year for foreign food stuffs. On the continent every nation is burdened with debt and none of them can ever hope to pay off its obligations. Measured by their natural resources and advantages for continued growth against their debts and the many disadvantages under which they labor they are practically bankrupt. In all of them the cost of production and living must steadily increase. In the United States we have scarcely laid the foundation for our future greatness. In natural resources we are richer than all of Europe; we are paying off our debts faster than they are due, we have barely scratched the ground in the development of our mineral wealth and our agricultural growth can scarcely be limited.

## A NEW WHEAT ROUTE.

One of the important lake departures announced for this season will be made by the New York, Ontario & Western railway. It will establish a line of steamers between Oswego, Superior and Duluth and enter into active competition with other through trunk lines between the seaboard and the northwest. The line is organized primarily to secure a share of the big grain traffic that comes eastward during the season of navigation but the new line will also furnish the Ontario & Western with an outlet for its coal business which is increasing.

Every west-bound boat will leave Oswego with a cargo of anthracite coal which will be distributed over the Northwestern roads with which they can make the best arrangements.

The Ontario & Western Company is building an elevator at Oswego with a capacity of 250,000 bu. for handling the grain. The company has, it is claimed, the shortest rail haul of any of the trunk lines from a lake port to the seaboard. The boats are chartered and are of the necessary draught to pass the Welland Canal.—*Market Record*.

## RUSSIA IN NEED OF CLEANING MACHINERY.

A St. Petersburg journal, of recent date, says: "The special commission convoked by the Russian Government, with a view to discover whether an official inspection should be instituted on all grain exported from Russia, in order to determine the extent of impurities to be allowed, has definitely decided in the affirmative: so that hereafter all the grain exported will have to be cleaned, and the State will exercise a surveillance over this measure. As Russia does not manufacture

cleaning machinery, recourse will have to be made to foreign manufacturers; to this end a proposal has been made to allow such machinery to enter Russia free of duty, so that there will probably be, this year, a large demand for this class of machinery. The demand for milling machinery generally is also likely to extend, since millers in South Russia are discussing means whereby Russian grain shall be exported in the shape of flour, the advantage of which, being beneficial to the State, the Government has lent its support to the project, and will aid millers in bringing about this result. The machinery exhibition, which will be held in St. Petersburg, in January, 1894, will have a special section for corn winnowers, trieurs and apparatus for drying and conditioning grain."

## WHERE GREENBACKS ARE REDEEMED.

With a "pass" from the Treasurer we may walk through the Redemption Division, as it is called, where the worn-out bank-bills are received and cancelled and destroyed. You would be amazed to see the skill with which fragments of bills that have been soaked in water nearly to a pulp, scorched and crisped by fire, or gnawed by rats, are pieced together on paper the size of the original bill, so that their value can be found. When all is done, they are placed under a glass, which is also of the same size as the bill, and is divided into sections that will show very nearly the precise fractional part of the bill which is missing, so that if a tenth part of a one-dollar bill is gone, the bill is at once seen to be worth but ninety cents. The women do this work with surprising accuracy and dexterity. It is not always pleasant work, for the money is sometimes fearful stuff to handle when it comes in to be counted—reeking with filth, and having a shocking odor. That which is to be destroyed or replaced with new is put on a machine run by a turbine wheel, which punches the packages in several spots so that it would be nearly impossible to use the bills again, and it is then taken to a peculiar furnace to be burned, where the coloring matter, chemical and metallic, of its substance makes a curious vividly tinted slag.—*Harriet Prescott Spofford, in Harper's Young People*.

## TO PREVENT WHITE EFFLORESCENCE ON BRICK WALLS.

The white efflorescence which so often disfigures our otherwise handsome brick buildings and gives to them an appearance of dilapidation not justified by their age, is said to be

due to the presence of lime in the clay from which the bricks are made. Numerous remedies have been suggested generally consisting of a kind of paint to be applied after the bricks are laid in the wall, and while generally successful in so far as they prevent the exudation of the discolored element, do not preserve the original appearance of the wall. *Thouindustrie-Zeitung* says that where lime is the cause of the efflorescence it can be entirely prevented by dipping the bricks before burning into dilute acid. The strength of the acid should be determined by the amount of lime present in the clay, the greater the amount of lime the more dilute the acid. For ordinary clay it says a solution composed of forty quarts of water to one of hydrochloric acid is the best for the purpose and the quantity sufficient for dipping five hundred bricks, when the solution should be renewed. The bricks having been dipped and thoroughly dried in the sun are dipped and dried again just before burning. The operation only adds twelve cents a thousand to the cost of the bricks in Germany, and while the added cost would be somewhat greater in this country, the idea would seem to be worthy of adoption by our brickmakers who could command a moderate increase on the price of their material by guaranteeing the absence of the white coating.—*North-western Architect*.

A NEW METAL PAINT.—A new kind of paint is announced which, it is claimed, possesses in a peculiar degree the properties of preserving metals from rust, and is unaffected by either heat or cold. When applied to sheet iron it is found that the coating is not affected by warm water or steam, nor is it at all influenced by the action of acid and alkaline liquids, ammonia gas, hydrochloric acid gas and sulphureted hydrogen gas. The principal ingredient of this paint is silicate of iron which is found in the neighborhood of natural deposits of iron ores, and also occurs in veins of deposits of granite, which have become decomposed by contact with the air. The deposit, which is employed in the form of a finely ground powder, is found to be composed mainly of oxide of iron, with small proportions of silicic acid, phosphoric acid, alumina, lime, magnesia, etc. The silicate of iron, in a very finely divided state, is mixed with oxidized linseed oil and varnish, to form a paste, and when required in the form of paint it is thinned down with good linseed oil, to which, if deemed desirable, a dryer—such as litharge—is added, at the same time as mineral colors for producing the required shade.



## ALL KINDS.

There's an evening up of matters  
In this curious world of ours;  
Just a sort of compensation  
Granted by the higher powers;  
And we've seen it clearer,  
And, methinks, we never will,  
Than when gazing at a plumber  
Settling a coal dealer's bill.

New York Sun.

THE man who waits for something to turn up of course remains at the bottom.—*Cleveland Plain Dealer.*

COL. C. J. MURPHY is still keeping up his efforts to introduce Indian corn for use as human food in European countries, as he has lately given a corn dinner to fifty scientists and agriculturists at Copenhagen.

"What do you think will be the biggest thing you will see at the World's Fair?" said Mrs. Fucash. "My hotel bill," replied her husband gloomily.—*Washington Star.*

IN three years from 1893, Wisconsin can celebrate an important centennial. In 1796 Wisconsin first became American territory.

HE—Now, supposing you had a little boy that was getting too large to sleep with his parents, what would you do with him? She—I don't know. What? He—Why boycott him of course.—*S. & G's Monthly.*

ONTARIO, Canada, flour dealers report that American flour is getting into the lower Provinces, notwithstanding the duty of fifty cents per barrel. They say it is sent in as feed and afterward sold as low grade flour.

FIRST boy (contemptuously)—Huh! Your ma takes in washing. Second boy—O'course; you didn't suppose she'd leave it hanging out over nights unless you're pa was in jail, did ye?

BOSTON TRANSCRIPT: Prospective Investor—It is quite a pretty looking machine; but will it do what is claimed for it? Will it work? Promoter—Work? What has that got to do with it? It is a good thing to sell stock on. What more do you want?

IN April, 1892, the United States senate passed a resolution directing the committee on agriculture and forestry to investigate the conditions of the agricultural interests in the United States and if found depressed to ascertain the causes and inquire into the proper remedy. The committee has appointed a subcommittee consisting of Senators Pepper, Roach and Washburn, to investigate that branch of the industry relating to wheat, oats, meal, etc. The subcommittee will go to work at an early day and make an investigation as thorough as practical.

IT is a little discouraging to a man to carry a yowling, squalling baby around for half a night, then sit down and reflect that "of such is the kingdom of heaven."—*Cleveland Plain Dealer.*

PHILADELPHIA TIMES: "Mamma," asked Willie with much interest, "don't men go to heaven?" "Why, of course they do," replied mamma. "Well, I've seen a good many pictures of angels," said Willie, "and I never saw a man among them. They're all women."

GERMANY leads the world in the production of potatoes, her annual crop being about 900,000,000 bushels and in some years over 1,000,000,000. France comes next in gross amount her annual crop of "pommes de terre," or apples of the earth, amounting to nearly 400,000,000 bushels. Austria and Russia each grow about 300,000,000 bushels, England, Ireland and Scotland together about 230,000,000 bushels, and the United States 170,000,000 bushels.

The importance of the potato as a food crop is shown by the fact that in Europe the potato crop for all the countries reported aggregates more bushels than the combined wheat and rye crop, and the crop of that continent exceeds in volume the aggregate wheat crop of the world.

INDIANAPOLIS JOURNAL: "There is one thing I like about the religion that this here Sam Jones dishes up," said the man with clay on his boots and hayseed in his beard. "It don't interfere none with the language a feller uses when he is a-driving mules."

FOLLOWING are a few "money-bringing axioms" from Nathaniel C. Fowler's illustrated manual for business men, entitled "Building Business." They can be read with profit by merchants and manufacturers generally:

The man who cannot use advertising in his business has no business to be in business, and generally isn't.

Advertising is the salesman's ally.

Advertising brings people to the store or office, and there its mission stops; then success depends upon the quality of the advertised, the price of the goods and the salesman.

If advertising does not pay it is because it is misdirected.

To expect a single advertisement to pay is as foolish as to hope to grow fat from the effect of one dinner.

The merchant who appears in print but once is regarded with suspicion.

Well-written advertisements are more than 50 per cent new.

MILLION: "I can not understand sir, why you permit your daughter to sue me for breach of promise. You remember that you were bitterly opposed to our engagement because I wasn't good enough for her, and would disgrace the family." "Young man, that was sentiment; this is business."

Guest (who is entirely bald) Here, waiter, take this soup away. Don't you see there is a hair in it?

Waiter—Pardon me, sir, but isn't it possible that that is one of your own hairs?

Guest (aside)—What an admirable flatterer! Really he deserves a *pourboire*.—*Fliegende Blaetter.*

## LITERARY NOTES.

MARION HARLAND will contribute to the next number of *Harper's Bazar* the first of a short series of articles entitled "Common-sense among the Chickens," containing practical directions and suggestions regarding the care of poultry, with valuable hints on poultry raising for profit.

THE May number of *Lippincott's Magazine*, ready April 20, will contain a complete novel entitled Mrs. Romney, by Rosa Nouchette Cary, author of "Not Like Other Girls," "Queenie's Whim," "Mary St. John," etc. Also, the third of *Lippincott's Notable Stories*, a series to be published monthly on an original competitive plan, explained in this and succeeding numbers. And the usual variety of stories, essays, poems, etc. This number will be profusely illustrated.

THE May number of *Harper's Magazine*, appearing just before the opening of the World's Fair, will contain an article apropos of that event, entitled "A Dream City," by Candace Wheeler. It will describe some of the general aesthetic features of the Exposition, especially such as will be most likely to impress the imagination of the visitors when it first presents itself to them as a whole. The illustrations which

accompany the article will be numerous and beautiful.

APROPOS of the approaching naval parade, the next number of *Harper's Weekly*, published April 19th, will contain several attractive illustrations of naval subjects, including a view of the rendezvous at Hampton Roads, a front-page picture by R. F. Zogbaum, naval manœuvre scenes, etc. Another prominent feature will be an article on the cavalry school at Saumur, France, "A Nursery of French Cavalry," profusely illustrated. The Pope's exhibit at the World's Fair will be appropriately noticed, and the "Entrance to the Electrical Building" will be the subject of illustration. There will also be articles, with illustrations, on the new Municipal Art Society, on the last of the old Dutch houses at Albany, and on several other timely topics.

THE contents of *Harper's Weekly* published April 12th presents among other valuable matter the following varied and remarkably interesting array of attractions: Portraits and sketches of Admirals Gherardi, Walker, and Benham; a double-page naval picture, entitled "All Hands to Skylark," by R. F. Zogbaum; an article on the history of naval costumes, with portraits and illustrations; an article by Miss Dodge on the College for Teachers, with an illustration of the new building to be erected; a full-page picture of a scene in Washington, "Office Seekers," by T. de Thulstrup; a superbly illustrated article on the city of Stockholm, by Maurice Barrés; illustrations of the Columbian Exposition; illustrated articles on the Stock Exchange Clearing-house in New York and the Art Reception in Cincinnati; another of Conan Doyle's "Sherlock Holmes" Stories, entitled "The Adventure of the Gloria Scott," with illustrations, etc.

SCRIBNER'S MAGAZINE for April opens artistically with a rich group of illustrations by Robert Blum, who has recently returned from a two-year's residence in Japan. He has written several papers detailing in a most entertaining way his experiences while in that country, and each of these will be fully illustrated from the remarkable collection of sketches and pictures which are the fruit of his study in that country. This paper is called "An Artist in Japan," and is taken up with the vivid first impressions which that country makes on an artistic temperament. In another article in this number, "A New England Farm," writer and illustrator are united in one person, with the additional novelty that the drawings are also engraved by the author, Frank French (whose article entitled "A Day with a Country Doctor" in this magazine was, it is believed, the first example in an American periodical of a contribution written, drawn and engraved by the same man). In the present instance Mr. French gives a delightful picture of what a city man has accomplished on an abandoned New England farm. The entire number is quite up to the usual standard of this popular magazine.

THE most prominent feature of the *Review of Reviews* for April is a character sketch of Mr. Cleveland's new cabinet, from the pen of Prof. Woodrow Wilson, the distinguished and brilliant writer upon American politics and history who adorns the chair of Jurisprudence at Princeton University. Dr. Woodrow Wilson is a Southerner who was sent North for his college education and graduated about 1878 at Princeton. Afterwards he studied law at the University of Virginia, and for awhile practiced at the Atlanta, Ga., bar. He then decided to devote himself to the more scientific and scholarly side of professional and political study, and entered the post graduate department of Historical Science at the Johns Hopkins University. He

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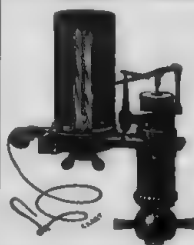
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received the degree of Doctor of Philosophy there, and after holding professorships in other well-known institutions was called to the prominent place he now holds at Princeton. He is one of the most trenchant as well as able writers upon American administrative and political history. It happens that this same number of the *Review of Reviews* contains a review of Professor Wilson's new book, "Division and Reunion," which covers in a compact little volume the period from the first inauguration of Andrew Jackson to the end of Grover Cleveland's first term. The present character sketch of the Cleveland cabinet is one of Mr. Wilson's most felicitous pieces of work and will deserve very wide attention. It is, upon the whole, in very decided sympathy with the President. It contains probably the best analysis of the peculiar condition of political parties at the present time in this country that has been made by any writer.

## A FIELD FOR AMERICAN ENTERPRISE.

Most of the flour mills in Spain are furnished with machinery from England, France and Germany, and the amount expended for these articles exceeds \$5,000,000—indeed close to \$6,000,000. Only a few American cleaners can be found in the mills. Each year the Spaniards are induced to introduce better machinery, but this is only effected though the personal efforts of practical men from England, France and Germany, who appear upon the ground, superintend the machinery and demonstrate its effectiveness. Here is a wide field for American enterprise.—*N. Y. Produce Exchange Reporter.*

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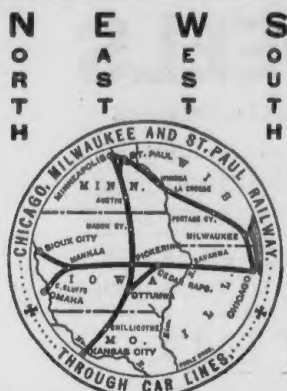
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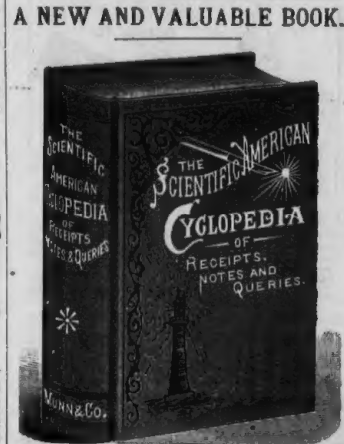
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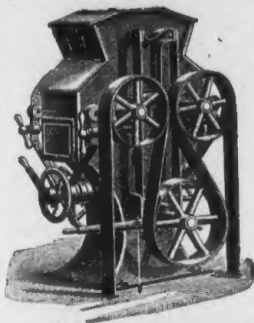
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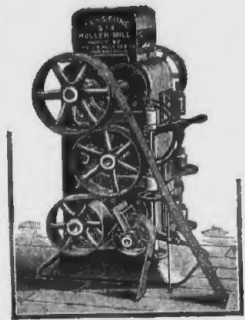
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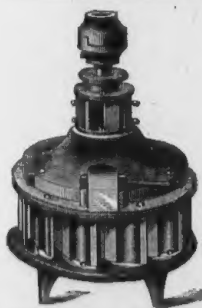
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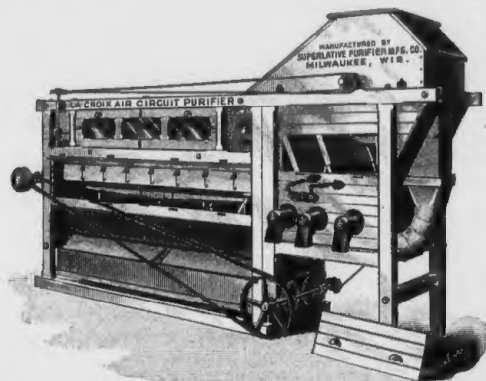
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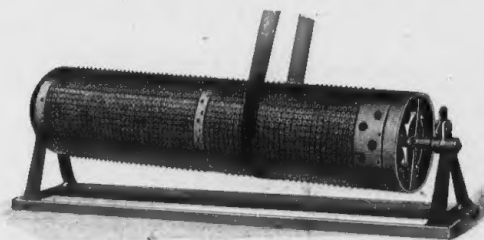
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